

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Backcountry Against Dumps,)
Complainant,)
)
vs.)
)
San Diego Gas and Electric Company (U-902-M),)
Defendant.)
)
)
_____)

COMPLAINT

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March 10, 2014

INTRODUCTION

1. Pursuant to California Public Utilities Code section 1702 and Rule 4.1 of the California Public Utilities Commission's ("CPUC's" or "Commission's") Rules of Practice and Procedure, Backcountry Against Dumps ("Backcountry") hereby files this Complaint against San Diego Gas and Electric Company ("SDG&E") with regard to its East County Substation Project, Application 09-08-003 ("ECO Substation" or the "Project"), for which the Commission approved a permit to construct ("PTC") in its June 21, 2012 Decision 12-06-039 (attached hereto as Exhibit 1). Pursuant to Rule 1.8, Backcountry Against Dumps authorizes the Law Offices of Stephan C. Volker to file this Complaint on its behalf.

2. The Complaint of Backcountry Against Dumps (P.O. Box 1275, Boulevard, CA 91905; (619) 766-4170) respectfully shows that SDG&E (101 Ash St., HQ 12, San Diego, CA, 92101; (800) 411-7343) has violated mitigation measure HYD-3 ("MM HYD-3") – compliance with which is a condition of the Commission's PTC grant to SDG&E for the Project – by failing to identify "one or more confirmed reliable water sources that when combined meet the project's full water supply construction needs." Exhibit 1, Attachment, p. 39. At least three of SDG&E's identified sources of water – the Live Oak Springs Water Company, the City of San Diego, and groundwater from the Campo Indian Reservation – are unconfirmed, if not entirely unavailable. And the lone remaining source, the Jacumba Community Service District, cannot even come close to meeting the Project's remaining construction water supply needs. Complainant Backcountry is injured by SDG&E's failure to comply with MM HYD-3 and its impacts on eastern San Diego County's already strained water supplies, concerns Backcountry has repeatedly raised since it intervened in the Commission's proceeding on SDG&E's PTC application for the

Project. *See* Opening Brief of Backcountry Against Dumps, In the Matter of the Application of SDG&E (U902 E) for a Permit to Construct Electrical Facilities with Voltages between 50 kV and 200 kV and New Substations with High Side Voltages Exceeding 50 kV: The East County Substation Project, Application 09-08-003, filed November 7, 2011, pp. 17-18 (attached hereto as Exhibit 2). The details of Backcountry's Complaint are explicated below.

3. Backcountry seeks as a remedy an Order from the Commission (1) finding SDG&E has violated MM HYD-3; (2) directing SDG&E to rescind its September 30, 2013 Water Supply Plan; (3) ordering SDG&E to develop a new water supply plan that complies with Decision 12-06-039 and MM HYD-3; (4) suspending SDG&E's Permit to Construct the ECO Substation Project; and (5) rescinding the Energy Division's approval of SDG&E's Minor Project Refinement Request #8.

SPECIFIC GROUNDS FOR COMPLAINT

SDG&E's Reliance on the Live Oak Springs Water Company Violates MM HYD-3 and D.12-06-039 Because It Is an Unconfirmed and Unreliable Water Source for the Project.

4. SDG&E has consistently represented to the Commission that Live Oak Springs Water Company (hereinafter "Live Oak") is a "viable and reliable source[]" that SDG&E can and will use to provide up to 35 million gallons of construction water to the Project. SDG&E, East County Substation Project Amended Construction Water Supply Plan, Revised September 30, 2013 (hereinafter "Water Supply Plan"), p. 3 (attached hereto as Exhibit 3); East County Substation Project Minor Project Refinement Request, No. 8, September 20, 2013 (original submission), October 1, 2013 (resubmitted) ("MPRR-8"), Attachment A, p. A-4 (attached hereto as Exhibit 4). SDG&E further maintains that Live Oak has "been confirmed as compliant with

applicable laws and regulations to provide water for construction of the Project . . .” Exhibit 3, p. 5.

5. SDG&E is doubly wrong. Live Oak is neither compliant with applicable laws and regulations to provide water for construction, nor a reliable and confirmed source of water. Indeed, as discussed below, Live Oak is *prohibited* from “supply[ing] water to Beta Engineering” for Project use. December 19, 2013 letter from Bruce DeBerry to Nazar Najor Re: Rejection of Advice Letter 28 (attached hereto as Exhibit 5).

6. SDG&E’s Water Supply Plan cites an October 26, 2012 service confirmation letter from Live Oak to support its claim that the water company could provide up to 35 million gallons of water for Project construction. Exhibit 3, Attachment C. On February 1, 2013, Live Oak transmitted Advice letter 28 to the Commission, in which it requested approval of a contract to supply water to Beta Engineering (SDG&E’s construction contractor) for Project construction. Live Oak, Advice Letter 28, February 1, 2013 (attached hereto as Exhibit 6). The Commission suspended Live Oak’s Advice Letter 28 because Live Oak had not provided sufficient information confirming its rights and ability to supply water for the Project, including the requisite approvals from the State Water Resources Control Board and San Diego County’s Office of Environmental Health. CPUC Advice Letter Suspension Notice February 21, 2013, at p. 2 (attached hereto as Exhibit 7). As a result, immediately after Project construction began in March 2013, the Commission found that the Live Oak was selling water for the Project in violation of the Commission’s suspension of Advice Letter 28. CPUC Violation Notice March 21, 2013 (attached hereto as Exhibit 8). Live Oak never corrected these omissions.

7. As a result of Live Oak’s failure to confirm its rights and ability to supply water

for the Project, along with the many other legal violations discovered during “the Commission’s investigation into the operations and practices of the utility,” the Commission “reject[ed] Advice Letter no. 28 with prejudice” in a December 19, 2013 letter to Live Oak. Exhibit 5. Without an approved tariff schedule, Live Oak is prohibited from selling trucked water for the Project. *Id.*

8. Furthermore, the Commission found in its July 29, 2013 Decision 13-07-036 (attached hereto as Exhibit 9) that the utility has consistently operated in violation of numerous Commission rules, including an improper commingling of utility and non-utility business interests, failing to receive Commission approval for changes in ownership, and use of the utility property as collateral. Exhibit 9, pp. 16-18, 22; *see also* CPUC March 28, 2013 Notice of Violation (attached hereto as Exhibit 10). As a result, the Commission initiated receivership proceedings against Live Oak, further undermining its reliability as a water source. Exhibit 5.

9. Because Live Oak is – and has been for most of the Project construction period – prohibited from selling trucked water to Beta Engineering for Project use, Live Oak is not a reliable water source for the Project. By including Live Oak in its water supply plan for the ECO Substation Project, and by continuing to identify Live Oak as a water source in its Water Use Reports, SDG&E is in violation of MM HYD-3 and Commission Decision 12-06-039. Exhibit 1, Attachment p. 39; Exhibit 3, p. 3; SDG&E East County Substation Project Construction Water Use Report, January 1, 2014 - January 31, 2014 (“January Water Use Report”), p. 1 (attached hereto as Exhibit 11).

SDG&E’s Reliance on Water from the City of San Diego Violates MM HYD-3 and D.12-06-039 Because It Is an Unconfirmed and Unreliable Water Source for the Project.

10. SDG&E has also consistently represented to the Commission that the City of San

Diego (“City”) is a “viable and reliable source[.]” that SDG&E can and will use to provide up to 50 million gallons of construction water to the Project. Exhibit 3, p. 3. Again, SDG&E is mistaken.

11. SDG&E’s reliance on water from the City violates MM HYD-3 and Commission Decision 12-06-039 because SDG&E is no longer authorized to use *any* City water. Exhibit 3, p. 3; Exhibit 1, Attachment, p. 39. The City’s “Service Confirmation Letter” (“Letter”) states that pursuant to the Fire Hydrant Meter Permit (“Permit”) issued by the City to Beta Engineering on November 14, 2012, “up to 50 million gallons of water shall be available for Project use during the period November 26, 2012 *through November 26, 2013.*” Exhibit 3, Attachment A (emphasis added) (also providing that [u]pon approval of an extension of the Permit, the use period may be extended through November 26, 2014,” though not providing for any increase in water use above 50 million gallons). Because the permit expired on November 26, 2013, and there is no evidence that it was extended – or that SDG&E even *requested* a permit extension “prior to [its] expiration” – SDG&E is prohibited from using any more City water without first obtaining a new permit.

12. Furthermore, even if the City *had* extended the Permit, there would still be insufficient water available to meet the remaining Project construction needs. As of January 31, 2014, SDG&E still needed nearly 30 million gallons of water to complete Project construction (90 million gallons minus the 60,578,263 gallons used as of January 31). Exhibit 3, p. 2; Exhibit 4, p. 1; Exhibit 11, p. 1. Yet as of that same date SDG&E had already used more than 37 million of the 50 million-gallon allotment from the City. Exhibit 11, p. 1. Even if the permit was extended, the less than 13 million gallons remaining would not be nearly enough to meet

SDG&E's outstanding 30-million-gallon Project construction water demand. SDG&E's water sources would remain insufficient even when combined with the less than 5 million gallons still available from SDG&E's lone seemingly reliable water source – the Jacumba Community Service District.

13. In sum, because SDG&E is no longer authorized to use any City water, the City's water is not a "confirmed, reliable water source[]" on which SDG&E may rely to comply with MM HYD-3 and the Commission's Order in D.12-06-039. Exhibit 1, Attachment, p. 39. And because the City would not have been able to "meet the project's full water supply construction needs" in any event, even when combined with SDG&E's other water sources, SDG&E's Water Supply Plan is doubly defective. Exhibit 1, Attachment, p. 39. For those same reasons, the Commission's approval of SDG&E's Minor Project Refinement Request #8 (increasing the total construction water usage from 50 million gallons to 90 million gallons) is in error, since it is predicated on the City of San Diego providing the *entire* 40 million gallons of additional water needed for Project construction. CPUC letter to SDG&E, Minor Project Refinement Request (MPRR) #8 – Construction Water Use – East County Substation Project (Application No. 09-08-008), October 1, 2013 (attached hereto as Exhibit 12); Exhibit 11, p. 1.

SDG&E's Reliance on Campo Groundwater Violates MM HYD-3 and D.12-06-039 Because It Is an Unconfirmed and Unreliable Water Source for the Project, and SDG&E Has Failed to Demonstrate that It Complies with All Applicable Laws and Regulations.

14. SDG&E's largest claimed "viable and reliable source[]" of Project construction water is a group of "[w]ells located on the southeastern portion of the Campo Indian Reservation." Exhibit 3, pp. 3 (first quote), 4 (second quote). According to SDG&E, these Campo Reservation wells have a "[m]aximum total volume [of] 52.75 million gallons." *Id.* at p.

4. But they have thus far produced barely one-fifth of that volume – 12,181,187 gallons as of January 31, 2014 – and may not produce any more. Exhibit 11, p. 1. As discussed below, the Campo Reservation groundwater is simply not a “confirmed, reliable water source[.]” on which SDG&E may rely to comply with MM HYD-3 and the Commission’s Order in D.12-06-039. Exhibit 1, Attachment, p. 39.

15. Far from a “confirmed, reliable” water source, the “Campo Indian Reservation (Campo) [has *entirely*] *stopped* providing construction water deliveries to the Project” as of November 18, 2013. Exhibit 11, p. 1. And SDG&E has provided no evidence that the Campo Band of Mission Indians (“Campo Band”) will ever change its mind and begin deliveries anew.

16. Furthermore, in violation of MM HYD-3, SDG&E *has never* “demonstrat[ed]” that its (or its contractors’) purchase – and off-Reservation use – of Campo’s well water “compli[es] [with] all applicable laws and regulations.” Exhibit 1, Attachment, p. 39. SDG&E asserts in its Water Supply Plan that “Attachment 4 to Attachment F: Environmental Navigation Services Inc. Report includes a letter from Muht-Hei, Inc. confirming the legal authority of the Campo Band of Mission Indians to sell water for off-reservation use for construction purposes without an MUP from San Diego County.” Exhibit 3, p. 4. Wrong. The undated letter from Muht-Hei, Inc. (“MHI”) – a Campo Band corporation – to Jed Francis, Inc. (“MHI letter”) does *not* “demonstrat[e] . . . compliance [with] all applicable laws and regulations” for at least two reasons. Exhibit 1, Attachment, p. 39 (quote); Exhibit 3, Attachment 4 to Attachment F.

17. First, MHI admits in its letter that the Campo General Council *never* approved the pumping, sale, and off-reservation use of Campo Reservation groundwater. Exhibit 3, Attachment 4 to Attachment F. MHI asserts in its letter that no “additional Council approval”

was required, but it provides *no supporting authorities whatsoever*. *Id.*

18. Second, despite MHI's contention in its letter that the sale of Campo Reservation groundwater to Jed Francis, Inc. complies with applicable laws, it *never* states *how much* water can be legally pumped and used. Exhibit 3, Attachment 4 to Attachment F. Furthermore, while the MHI letter limits pumping to wells at the Campo Materials Company facility, there is no information about the number or location of those wells. *Id.* This omission is troubling in view of the fact that the Campo Materials facility, located at 36501 Church Road in Campo, California 91960, is located *miles* to the north of the Campo Reservation wells that SDG&E identifies elsewhere as being available for Project use. Exhibit 3, Attachment F. Without this critical information, there is simply no evidence that there are "53.75 million gallons" – or indeed *any* specific quantity – of Campo Reservation groundwater legally available for extraction and use. Exhibit 3, p. 4.

19. In sum, with water deliveries indefinitely – if not permanently – stopped, and insufficient evidence "demonstrat[ing] . . . compliance [with] all applicable laws and regulations," the Campo Reservation groundwater is not a "confirmed, reliable water source[]" on which SDG&E may rely to comply with MM HYD-3 and the Commission's Decision 12-06-039. Exhibit 1, Attachment, p. 39. The risks of relying on this unconfirmed and unreliable water source are exacerbated by the fact that the Campo Reservation wells – like the Live Oak wells – draw from the fragile Campo-Cottonwood Sole Source Aquifer, which is the "sole or principal source of drinking water for the population in the vicinity of the communities of Boulevard, Campo, and Pine Valley in eastern San Diego County." 58 Fed.Reg. 31024-04, May 28, 1993; Official Environmental Protection Agency Campo-Cottonwood Sole Source Aquifer Map

(attached hereto as Exhibit 13).

SDG&E Has Failed to Identify Sufficient “Confirmed, Reliable Water Sources” to “Meet the Project’s Full Water Supply Construction Needs.”

20. D.12-06-039 and MM HYD-3 require SDG&E to identify “one or more confirmed reliable water sources that *when combined meet the project’s full water supply construction needs.*” Exhibit 1, Attachment, p. 39 (emphasis added). SDG&E has failed to meet this requirement. As discussed above, water supplies from Live Oak, the City of San Diego, and the Campo Indian Reservation are all unreliable, unconfirmed and may never be available again. Thus, pursuant to SDG&E’s Water Supply Plan, the lone water source still available to SDG&E for Project construction is the Jacumba Community Service District. But by itself, the Jacumba Community Service District *cannot come close* to fulfilling SDG&E’s remaining Project construction water needs, due to (1) limitations on the amount of water available for the Project, and (2) the boundaries of the District’s Sphere of Influence.

21. According to its October 2, 2012 water service confirmation letter to Beta Engineering, the Jacumba Community Service District can only supply “*up to 15 million gallons*” of water for the Project. Exhibit 3, Attachment B (emphasis added). However, SDG&E has *already used* 10,474,626 of those 15 million gallons. Exhibit 11, p. 1. Therefore, *fewer than 5 million gallons* remain available for Project use ($15,000,000 - 10,474,626 = 4,525,374$). *Id.* This small quantity of water cannot meet the Project’s remaining water supply needs. As of January 31, 2014, SDG&E had used approximately 60.5 million of the 90 million gallons of water it estimates will be required for Project construction, leaving a remainder of *nearly 30 million gallons* ($90,000,000 - 60,578,263 = 29,421,737$). *Id.* Even if the Jacumba Community

Service District delivers the entire remaining 4,525,374 gallons of water it approved for Project use, SDG&E would still need nearly *25 million gallons* more to complete construction. As discussed above, none of the other three water sources identified by SDG&E are currently capable of delivering that much water, either individually or together. SDG&E has provided no evidence showing otherwise. As a result, SDG&E has violated D.12-06-039 and MM HYD-3, which require SDG&E to identify “one or more confirmed reliable water sources that when combined meet the project’s full water supply construction needs.” Exhibit 1, Attachment, p. 39.

22. The Jacumba Community Service District is limited to delivering water within its Sphere of Influence, unless it “first requests and receives written approval” from the San Diego County Local Agency Formation Commission (“LAFCO”). Government Code §§ 56133(a) (quote), 61100. Since the ECO Substation is outside the Jacumba Community Service District’s Sphere of Influence, and there is no evidence that it ever requested or received written approval from LAFCO, the Jacumba Community Service District is not authorized to provide water to the Project. Exhibit 3, Attachment B; Jacumba Community Service District Sphere of Influence Map (attached hereto as Exhibit 14); East County Substation/Tule Wind/ Energia Sierra Juarez Gen-Tie Projects Final Environmental Impact Report/ Environmental Impact Statement, Figure D.14-2B (attached hereto as Exhibit 15). By relying on water from the Jacumba Community Service District for the Project, SDG&E violated D.12-06-039 and MM HYD-3, which require “one or more confirmed reliable water sources that . . . meet the Project’s full water . . . needs.” Exhibit 1, Attachment, p. 39.

23. SDG&E also fails to meet MM HYD-3’s requirement that SDG&E identify “one or more confirmed reliable water sources that when combined meet the project’s full water

supply construction needs” because its Water Supply Plan omits any mention of other projects in the area and fails to account for overlapping water use that will reduce the water available for this Project. Exhibit 1, Attachment, p. 39; Exhibit 3, pp. 1-5. Indeed, there are numerous projects in the area that will require water from the same unreliable sources SDG&E contends will meet this Project’s needs. Since these sources are not “confirmed, reliable water sources” and moreover, are subject to competing demands, they may not be relied upon to satisfy MM HYD-3’s requirement that SDG&E demonstrate a firm water supply for this Project.

24. For example, the Jacumba Community Service District is required to supply approximately 780,000 gallons of water for Sempra's Energia Sierra Juarez transmission line project (2,500 gallons per day x 6 days a week). San Diego County Department of Planning and Land Use, Memorandum from Patrick Brown, Project Planner, to Jim Bennett, Groundwater Geologist, Groundwater Supply Options; Project Numbers P09-008, March 4, 2010, p. 1 (attached hereto as Exhibit 16); 77 Fed.Reg. 49790, August 17, 2012 (“ESJ plans to access water from the Jacumba Community Services District”). It has also confirmed that it will supply up to 40,000 gallons per day for the Tule Wind Project. Letter from Jacumba Community Service District’s General Manager, Debby Troutt, to Iberdrola Renewables, Re: Tule Wind Project Construction Water, December 23, 2013 (attached hereto as Exhibit 17). Additionally, the Jacumba Community Service District claims it has facilities available to provide water to the Soitec Solar project, despite its location outside its service area. San Diego County Department of Planning and Land Use, Zoning Facility Availability Form, Water, December 12, 2012 (attached hereto as Exhibit 18).

25. The Jacumba Community Service District’s numerous and competing obligations

to provide water for projects in the area besides the ECO Substation Project conflict with its ability to provide water for the Project. Its over-commitment of regional groundwater supplies undermines the short- and long-term sustainability of those water sources. Without an analysis of these cumulative water supply constraints and impacts, SDG&E's Water Supply Plan cannot meet the requirements of D. 12-06-039 and MM HYD-3. Exhibit 1, Attachment, p. 39.

BACKCOUNTRY'S INJURY

26. Backcountry is a community organization whose primary mission is to protect the limited and ever-threatened water resources of Eastern San Diego County on which its members rely. As such, Backcountry has been vitally interested and involved in the ECO Substation Project PTC approval process since it began, and has repeatedly raised its concerns about hydrologic impacts – and specifically its concern regarding the lack of regional water supplies – to both SDG&E and the Commission. *See* Exhibit 2, pp. 17-18.

27. Backcountry and its members will be injured if Project construction is allowed to continue without “reliable confirmed water sources” to “meet the project’s full water supply construction needs.” Exhibit 1, Attachment, p. 39. By tapping unvetted and/or unapproved water sources, SDG&E risks appropriating water to which it has no legal right, exceeding the sustainable yield of the regional water sources and harming the local residents – including Backcountry’s members – who rely on those limited water sources for their livelihoods. *See* Exhibit 2, pp. 17-18. Furthermore, as both a group with a beneficial interest in the regional groundwater supplies and a Party to CPUC Proceeding A.09-08-003 (on SDG&E’s PTC for the Project), Backcountry has a protectable interest in ensuring that the mitigation measures – including MM HYD-3, on which the Commission conditioned its ECO Substation PTC grant in

that proceeding – are implemented and enforced. *Cf. Consolidated Irrigation District v. City of Selma* (2012) 204 Cal.App.4th 187, 206 (plaintiff had standing to challenge the City of Selma’s mitigated negative declaration for a residential development under the California Environmental Quality Act because it had “beneficial interests” in “the local groundwater” and its groundwater basin recharge efforts, which could have been hampered by “development projects that use groundwater”). SDG&E’s continued violation of MM HYD-3 and Commission Decision 12-06-039 prejudices Backcountry’s interest in having these Commission rulings enforced.

CATEGORY AND HEARING

28. The proposed category for this Complaint is ratesetting, pursuant to Rule 7.1(e)(2). Due to the nature of this Complaint there has been no attempt to informally resolve the matter with the Commission’s Consumer Affairs staff. A hearing is required on the Commission’s regular complaint schedule.

29. The issues to be considered are (1) whether SDG&E has complied with MM HYD-3 and Commission Decision 12-06-039, and (2) whether sufficient confirmed, reliable and legal water sources exist to meet the Project’s remaining need for construction water supplies.

30. The proposed schedule for resolving the Complaint within the normal 18-month schedule for proceedings categorized as ratesetting is as follows:

- Prehearing Conference: April 11, 2014
- Hearing: May 15, 2014

Complainant also requests that the prehearing conference and the hearing be held in Jacumba.

31. Wherefore, complainant requests that this Commission:

1. Issue an Order finding that SDG&E has violated MM HYD-3;

2. Order SDG&E to rescind its September 30, 2013 Water Supply Plan;
3. Order SDG&E to develop a new water supply plan that complies with Decision 12-06-039 and MM HYD-3;
4. Suspend SDG&E's Permit to Construct the ECO Substation Project, and order that all Project construction activities cease, until such time as SDG&E has fully complied with Decision 12-06-039, including developing a new water supply plan that identifies "one or more confirmed reliable water sources that when combined meet the project's full water supply construction needs." Exhibit 1, Attachment, p. 39; and
5. Rescind the Energy Division's approval of SDG&E's Minor Project Request Form #8, which increased the total construction water usage for the ECO Substation Project from 50 million gallons to 90 million gallons.

32. Please send the answer and other filings of the defendant and information and notices from the Commission by electronic mail to the addresses listed in the caption for Backcountry's counsel, to wit:

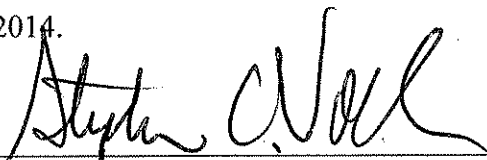
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Dated in Oakland, California this 10th day of March, 2014.

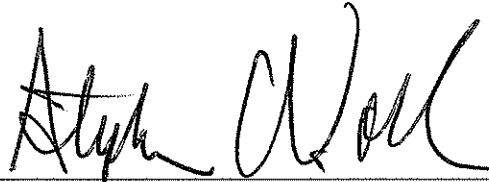
A handwritten signature in black ink, appearing to read "Stephan C. Volker". The signature is written in a cursive style with a horizontal line underneath it.

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VERIFICATION

I, Stephan C. Volker, am the attorney for the complainant in this action. Pursuant to Rule 1.11(d) of the Commission's Rules of Practice and Procedure, I make this verification on behalf of complainant Backcountry Against Dumps because its members are absent from the county in which my office is located. I have read the foregoing Complaint and know its contents. The facts therein alleged are true and correct to the best of my knowledge and belief.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that this Verification was executed in Oakland, California, on March 10, 2014.

A handwritten signature in black ink, appearing to read 'Stephan C. Volker', written over a horizontal line.

STEPHAN C. VOLKER

COMPLAINT EXHIBIT LIST

- Exhibit 1: CPUC Decision Granting San Diego Gas & Electric Company A Permit To Construct the East County Substation Project, Decision 12-06-039, Application 09-08-003, June 21, 2012
- Attachment: Mitigation Monitoring and Reporting Plan
- Exhibit 2: Opening Brief of Backcountry Against Dumps, In the Matter of the Application of SDG&E (U902 E) for a Permit to Construct Electrical Facilities with Voltages between 50 kV and 200 kV and New Substations with High Side Voltages Exceeding 50 kV: The East County Substation Project, Application 09-08-003, filed November 7, 2011, 17-18
- Exhibit 3: San Diego Gas & Electric Company, East County Substation Project Amended Construction Water Supply Plan, Revised September 30, 2013 (“Water Supply Plan”)
- Attachment A: City of San Diego Service Confirmation Letter, January 11, 2013
 - Attachment B: Jacumba Community Service District Service Confirmation Letter, October 2, 2012
 - Attachment C: Live Oak Springs Service Confirmation Letter October 26, 2012
 - Attachment D: Cal. Dept. of Health Services Domestic Water Supply Permit, December 30, 2002
 - Attachment E: County of San Diego Withdrawal of Major Use Permit Application, November 21, 2011
 - Attachment F: Environmental Navigation Services Inc. Report, June 14, 2013 (with sub-attachments 1-4)
- Exhibit 4: East County Substation Project Minor Refinement Request Form, No. 8, September 20, 2013 (original submission), October 1, 2013 (resubmitted) (“MPRR-8”)
- Attachment A: Minor Project Refinement Request Screening Form
- Exhibit 5: December 19, 2013 letter from Bruce DeBerry to Nazar Najor Re: Rejection of Advice Letter 28
- Exhibit 6: Live Oak, Advice Letter 28, February 1, 2013
- Exhibit 7: CPUC Advice Letter Suspension Notice February 21, 2013
- Exhibit 8: CPUC Violation Notice March 21, 2013

- Exhibit 9: CPUC Decision 13-07-036, July 29, 2013
- Exhibit 10: CPUC, Notice of Violation, March 28, 2013
- Exhibit 11: SDG&E East County Substation Project Construction Water Use Report, January 1, 2014 - January 31, 2014
- Exhibit 12: CPUC letter to SDG&E, Minor Project Refinement Request (MPRR) #8 – Construction Water Use – East County Substation Project (Application No. 09-08-008), October 1, 2013
- Exhibit 13: Official Environmental Protection Agency Campo-Cottonwood Sole Source Aquifer Map
- Exhibit 14: Jacumba Community Service District Sphere of Influence Map
- Exhibit 15: East County Substation/Tule Wind/ Energia Sierra Juarez Gen-Tie Projects Final Environmental Impact Report/ Environmental Impact Statement, Figure D.14-2B
- Exhibit 16: San Diego County Department of Planning and Land Use, Memorandum from Patrick Brown, Project Planner, to Jim Bennett, Groundwater Geologist, *Groundwater Supply Options; Project Numbers P09-008*, March 4, 2010
- Exhibit 17: Letter from Jacumba Community Service District’s General Manager, Debby Troutt, to Iberdrola Renewables, Re: Tule Wind Project Construction Water, December 23, 2013
- Exhibit 18: San Diego County Department of Planning and Land Use, *Zoning Facility Availability Form, Water*, December 12, 2012

EXHIBIT

1

Decision 12-06-039 June 21, 2012

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of SAN DIEGO GAS & ELECTRIC COMPANY (U902E) for a Permit to Construct Electrical Facilities With Voltages Between 50 kV and 200 kV and New Substations With High Side Voltages Exceeding 50 kV: The East County Substation Project.

Application 09-08-003
(Filed August 10, 2009)

Allen K. Trial, for San Diego Gas & Electric Company,
Applicant.

Jeanne B. Armstrong, for San Diego Rural Fire District.
Stephen C. Volker, for Backcountry Against Dumps.

**DECISION GRANTING SAN DIEGO GAS & ELECTRIC COMPANY
A PERMIT TO CONSTRUCT THE
EAST COUNTY SUBSTATION PROJECT**

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ATTACHMENT - East County Substation Project Mitigation Monitoring, Compliance, and Reporting Plan	

**DECISION GRANTING SAN DIEGO GAS & ELECTRIC COMPANY
A PERMIT TO CONSTRUCT THE
EAST COUNTY SUBSTATION PROJECT**

1. Summary

This decision grants San Diego Gas & Electric Company a permit to construct the East County Substation Project, configured to include the ECO Substation Alternative Site combined with the ECO Partial Underground 138 kilovolt Transmission Route Alternative, with mitigation identified in the Mitigation Monitoring, Compliance, and Reporting Program attached to this order. This proceeding is closed.

2. Procedural Background

By this application, San Diego Gas & Electric Company (SDG&E) seeks a permit to construct the East County Substation (ECO Substation) Project, which includes a new 500/230/138 kilovolt (kV) electric substation, a new 500 kV transmission line of approximately 3,065 feet to loop the substation into the existing 500 kV Southwest Powerlink transmission line, rebuild of the Boulevard Substation to operate at 138/69/12 kV on a new parcel adjacent to the existing substation, a new 138 kV transmission line of approximately 13.3 miles from the ECO substation to the rebuilt Boulevard Substation, and a microwave communication relay system.

Pursuant to General Order 131-D, the Commission must find that the project complies with the California Environmental Quality Act (CEQA).¹ CEQA requires the lead agency (the Commission in this case) to conduct a review to identify environmental impacts of the project, and ways to avoid or reduce

¹ Public Resources (Pub. Res.) Code Section 21000 *et seq.*

environmental damage, for consideration in the determination of whether to approve the project or a project alternative. CEQA precludes the lead agency from approving a proposed project or a project alternative unless it requires the project proponent to eliminate or substantially lessen all significant effects on the environment where feasible, and determines that any unavoidable remaining significant effects are acceptable due to overriding considerations. (CEQA Guidelines §§ 15090, 15091, 15093, 15126.2, 15126.4 and 15126.6.) Because the project also requires approval from the federal Bureau of Land Management (BLM), it is also subject to environmental review pursuant to the National Environmental Protection Act, which requires the preparation of an environmental impact statement (EIS). Under these circumstances, CEQA encourages the state agency to conduct its environmental review jointly with the federal agency. (CEQA Guidelines § 15222.)

In addition, pursuant to General Order 131-D and Decision (D.) 06-01-042, the Commission will not certify a project unless its design is in compliance with the Commission's policies governing the mitigation of electromagnetic field (EMF) effects using low-cost and no-cost measures.

Accordingly, the scoping memo and ruling determined the following issues to be within the scope of the proceeding:

1. What are the significant environmental impacts of the proposed project?
2. Are there potentially feasible mitigation measures that will eliminate or lessen the significant environmental impacts?
3. As between the proposed project and the project alternatives, which is environmentally superior?
4. Was the environmental impact report (EIR) (in this case, the combined EIR/EIS) completed in compliance with CEQA, did the Commission review and consider the

- EIR/EIS prior to approving the project or a project alternative, and does the EIR/EIS reflect the Commission's independent judgment?
5. Are the mitigation measures or project alternatives infeasible?
 6. To the extent that the proposed project and/or project alternatives result in significant and unavoidable impacts, are there overriding considerations that nevertheless merit Commission approval of the proposed project or project alternative?
 7. Is the proposed project and/or project alternative designed in compliance with the Commission's policies governing the mitigation of EMF effects using low-cost and no-cost measures?

The Commission's Energy Division and the BLM issued the draft EIR/EIS on December 24, 2010, identifying the significant environmental impacts of the proposed project, the potentially feasible mitigation measures and alternatives that would eliminate or lessen the significant environmental impacts, and the environmentally superior project alternative (issues 1 through 3). Evidentiary hearing was held on May 2, 2011. The final EIR/EIS was received into the evidentiary record by Administrative Law Judge (ALJ) ruling on October 31, 2011. SDG&E, Backcountry Against Dumps (BAD) and the San Diego Rural Fire Protection District² filed opening briefs on all issues on November 7, 2011, and reply briefs on November 17, 2011. A public participation hearing was conducted on January 24, 2012, in Jacumba, California, after which the record was submitted. Submission was subsequently set aside to

² The San Diego Rural Fire Protection District's unopposed September 27, 2011, motion for party status was granted by ALJ ruling dated October 31, 2011.

admit Exhibit 13, containing errata to the final EIR/EIS, and the proceeding was re-submitted as of February 27, 2012.

By ruling dated March 19, 2012, the assigned Commissioner amended the schedule to provide for the issuance of an interim decision resolving issues 1 through 4 (including certification of the EIR/EIS), to be followed at a later date with a decision resolving the remaining issues in the proceeding. By D.12-04-022 issued April 19, 2012, the Commission certified the EIR/EIS as having been completed in compliance with CEQA and affirmed the EIR/EIS as reflecting the Commission's independent judgment.

3. Summary of Environmental Findings in D.12-04-022

3.1. Environmentally Superior Project Alternative

The EIR/EIS, as certified by D.12-04-022, identifies the environmentally superior project alternative, other than the "no project" alternative, as the ECO Substation Alternative combined with the ECO Partial Underground 138 kV Transmission Route Alternative, Tule Wind Alternative 5 (reduction in turbines) combined with Tule Wind Alternative 2 (underground the 138 kV transmission line from the operations and maintenance and collector substation facilities co-located on Rough Acres Ranch), and the Energy Sierra Juarez (ESJ) Gen-Tie Overhead Alternative Alignment.

The approved ECO Substation Alternative Site would avoid a significant prehistoric archeological site, thus avoiding the significant impacts that the substation site proposed by SDG&E would have on prehistoric archaeological resources. Whereas SDG&E proposed building the entire 138 kV transmission line above ground, the approved ECO Partial Underground 138 kV Transmission Route Alternative would underground two portions of the line for

environmental reasons. One portion of the alternative, in which the line would be rerouted and undergrounded along existing roadways between Mile Point (MP) 0.3 and MP 2.4, was developed as a result of consultation under Section 106 of the Historic Preservation Act to reduce cultural resource impacts. The second portion would underground the line between MP 9 and the rebuilt Boulevard substation, to minimize visual impacts to residents of the community of Boulevard. Undergrounding these two portions of the line also would minimize visual impacts at several scenic vistas. The potential for ignition of wildfires would be reduced and significant impacts on the effectiveness of firefighting would be avoided along the undergrounded portions of the line, compared to above-ground construction.

The EIR/EIS identified mitigation measures that would eliminate or lessen the project's adverse environmental impact; those measures are identified in the Mitigation Monitoring, Compliance and Reporting Plan (MMCRP) attached to this order. The EIR/EIS determines that, notwithstanding these mitigation measures, the environmentally superior project alternative will have the following significant and unmitigable adverse impacts.

3.2. Unmitigable Adverse Impacts

3.2.1. Biological Resources

The ECO Substation Alternative combined with the ECO Partial Underground 138 kV Transmission Route Alternative would have significant adverse and unmitigable impacts on Quino checkerspot butterfly critical habitat. Quino checkerspot butterfly is a federally endangered species found only in western Riverside County, southern San Diego County, and northern Baja California, Mexico. The substation would result in the permanent loss of 2.27 acres of U.S. Fish and Wildlife Service critical habitat for this species.

The Tule Wind Alternative 5 combined with Tule Wind Alternative 2 would have adverse and unmitigable impacts to birds, such as golden eagles, due to the risk of mortality from collision with operating wind turbines.

3.2.2. Visual Resources

The ECO Substation Alternative combined with the ECO Partial Underground 138 kV Transmission Route Alternative would be located in a predominantly undeveloped desert landscape in eastern San Diego County, approximately 0.5 mile to the west of the Jacumba Mountains Wilderness, and approximately 0.7 mile to 1.5 miles south of the Table Mountain Area of Critical Environmental Concern (ACEC) and Anza-Borrego Desert State Park. The substation would be mainly visible by travelers and dispersed residences along Interstate 8 and Old Highway 80, and views would also be possible from the Jacumba Mountains Wilderness, the Table Mountain ACEC and other BLM-administered public lands, and would substantially degrade the area's existing visual character.

The Tule Wind Alternative 5 combined with Tule Wind Alternative 2 would have significant adverse and unmitigable impacts on visual resources. The proposed wind turbines and associated overhead and underground 34.5 kV collector cable systems would be situated in a natural, undeveloped desert landscape of eastern San Diego County in the In-Ko-Pah Mountains near the McCain Valley. The northern extent of the project area would be bordered by high mountainous terrain to the north, northwest, and east including the Sawtooth Mountains Wilderness Area to the north, the Laguna Mountains to the northwest, and Sombrero Peak to the northeast in Anza-Borrego Desert State Park. The wind turbines would be visually dominant

and prominent against the skyline. The Tule Wind 138 kV transmission line would create significant impacts to scenic views where it would cross Interstate 8 and parallel and cross Old Highway 80 into the Boulevard Substation, and would introduce a moderate to strong industrial feature into a landscape characterized by a mixture of natural and rural community elements.

The ESJ Gen-Tie Overhead Alternative Alignment would be situated in a predominantly natural, undisturbed desert landscape in eastern San Diego County immediately south of the proposed ECO Substation. While the 500 kV or 230 kV gen-tie would not be openly visible or cause adverse visual impacts, the ESJ Phase 1 wind turbines to be located in Mexico would create strong, openly visible and sky-lined visual contrasts along the ridgeline and slopes of the Sierra de Juarez Mountains.

3.2.3. Cultural and Paleontological Resources

All components of the environmentally superior alternative would have potential adverse and unmitigable impacts to traditional cultural property (TCP). Although no TCPs have been identified, potential National Registry of Historic Places eligibility of unknown TCPs is assumed. In some cases, avoiding direct and indirect impacts to TCPs such as traditional landscapes, topographic elements including sacred mountains, or use areas may not be completely feasible. In this event, the impact on TCPs would be adverse and, while mitigation is provided, the impacts would not be mitigated to a level that is less than significant.

3.2.4. Noise

The ECO Substation Alternative combined with the ECO Partial Underground 138 kV Transmission Route Alternative and the Tule Wind Alternative 5 combined with Tule Wind Alternative 2 would have adverse and

unmitigable noise impacts that would occur temporarily during construction due to construction-related nighttime noise, helicopters and blasting.

3.2.5. Air Quality

Construction of the ECO Substation Alternative combined with the ECO Partial Underground 138 kV Transmission Route Alternative will generate emissions of nitrogen oxides (NO_x) and particulate matter less than or equal to 10 microns (PM₁₀) in excess of the significance levels recommended by the San Diego Air Pollution Control District; construction of the Tule Wind Alternative 5 combined with Tule Wind Alternative 2 will generate volatile organic compounds (VOC), NO_x, particulate matter less than or equal to 2.5 microns (PM_{2.5}), and PM₁₀ emissions in excess of the recommended significance levels; and construction of the ESJ Gen-Tie Overhead Alternative Alignment will generate PM₁₀ emissions in excess of the recommended significance levels. Construction of all three projects in combination will generate carbon monoxide (CO) emissions, as well as emissions of NO_x, VOC, PM₁₀ and PM_{2.5}, in excess of the recommended significance levels.

3.2.6. Fire and Fuels Management

The ECO Substation overhead transmission lines increase the probability of a wildfire and reduce firefighting effectiveness. As part of the plan for mitigating these impacts, SDG&E is required to develop a fire protection plan for the ECO Substation, which will be subject to review and comment by responsible agencies and final approval by the lead agencies (Mitigation Measure FF-4), and to provide funding assistance to the San Diego Rural Fire Protection District (District) (as well as to the San Diego County Fire Authority) to support fire code specialist positions in an amount to be determined by the lead agencies (Mitigation Measure FF-3). Because the fire

protection plan and funding assistance arrangements have yet to be approved by the lead agencies, the EIR/EIS states that the effectiveness of this mitigation in reducing these impacts “is not known and therefore, [the impacts are] considered unavoidable for purposes of the analysis conducted in this EIR/EIS.”

(Exhibit 11 at D.15-58 and D.15-68.)

4. Feasibility of Environmentally Superior Alternative

The feasibility of the environmentally superior alternative depends upon the BLM’s grant of a right of way for constructing and operating the facilities on public lands. In the event that the BLM grants a right of way for something other than the environmentally superior alternative, or other permitting agencies permit other components, such components of the environmentally superior alternative will be legally infeasible.

No party asserted that the environmentally superior alternative is infeasible for legal, social, technological, or other considerations. (CEQA Guidelines § 15091(a)(3).) However, we acknowledge the many public comments objecting to the environmentally superior alternative on the basis that undergrounding of a portion of the 138 kV transmission line is costly and therefore unreasonable. Specifically, at the public participation hearing conducted on January 24, 2012, in Jacumba, California, three speakers opposed undergrounding portions of the project on the basis that the cost of undergrounding is significant. In addition, outside of the public participation hearing, 16 people e-mailed public comments to the ALJ, and one person left a voice message, expressing their opposition to undergrounding for reasons of its high cost.

The incremental cost of mitigation is not in and of itself sufficient basis to reject the environmentally superior alternative as infeasible. In *Maintain Our*

Desert Environment v. Town of Apple Valley (2004) 124 Cal.App.4th 430, the court explained, “Economic unfeasibility is not measured by increased cost or lost profit, but upon whether the effect of the proposed mitigation is such that the project is rendered impractical But, if the project can be economically successful with mitigation, then CEQA requires that mitigation, regardless of the proponent’s financial status.” (*Id.* at 448-449.) There is no evidence that the ECO Partial Underground 138 kV Transmission Route Alternative Substation Project cannot be successfully accomplished as a result of the greater costs associated with undergrounding the transmission line, or that the cost of undergrounding will result in unreasonable rates.

The environmentally superior ECO Substation component is feasible.

5. Overriding Considerations

Pursuant to CEQA Guidelines § 15093, the Commission may only approve a project that results in significant and unavoidable impacts upon a finding that there are overriding considerations.

The ECO Substation project will enable the Tule Wind Project and other wind projects to interconnect to the California Independent System Operator (CAISO)-controlled transmission grid, aiding in progress towards federal and state greenhouse gas reduction and renewable electricity goals, including the requirements set forth in the California Renewables Portfolio Standard Program,³

³ The California Renewables Portfolio Standard Program was established by Senate Bill (SB) 1078 (Stats. 2002, Ch. 516, Sec. 3, codified as Pub. Util. Code §§ 399.1 *et seq.*, effective January 1, 2003). The Renewables Portfolio Standards Program or related elements have been amended several times, including by SB 107 (Stats. 2006, Ch. 464), AB 1969 (Stats. 2006, Ch. 731), SB 1036 (Stats. 2007, Ch. 685), SB 380 (Stats. 2008, Ch. 544), SB 32 (Stats. 2009, Ch. 328), SB 695 (Stats. 2009, Ch. 337), and SB 2 (2011-12 First Extraordinary Session, Stats. 2011, Ch. 1).

Assembly Bill (AB) 32 (Stats.2006, Ch. 488) (California Global Warming Solutions Act of 2006), the Governor's Executive Order S-14-08 to increase the state's Renewable Energy Standard to 33% renewable energy by 2020, and Title XVII, Section 1705, of the Energy Policy Act of 2005 (authorizing a new program for rapid deployment of, among other things, renewable energy projects).

In addition, the ECO Substation project will improve the reliability of electric service to SDG&E's customers in the local communities of Bankhead Springs, Boulevard, Jacumba, Manzanita, and the Campo, La Posta, and Manzanita Indian Reservations. These communities have experienced five to 30 outages per year in the past ten years with the longest outage being three hours and 50 minutes. (Exhibit 2 at 6.) The ECO Substation project would improve reliability by upgrading existing infrastructure and providing a second source for the southeastern 69 kV transmission system. (*Id.* at 6 and 7.)

SDG&E touts the project's creation of hundreds of green jobs and injection of approximately \$36 million into the local economy as an additional benefit that supports a finding of overriding consideration. The Commission's responsibility is to ensure safe and reliable utility service at just and reasonable rates. While the ECO Substation project may provide these benefits, it is not evident that we have the authority to approve it, notwithstanding its significant and unavoidable environmental impacts, on the basis of its jobs creation and economic stimulus.

We find that the ECO Substation Project's contribution to California's progress toward federal and state greenhouse gas reduction and renewable electricity goals, and the increased reliability of electric service to the local communities, are overriding considerations that support our approval of the ECO Substation project, configured as the ECO Substation Alternative combined with the ECO Partial Underground 138 kV Transmission Route Alternative,

despite its significant and unavoidable impacts on biological resources, visual resources, cultural resources, noise, air quality, and fire and fuels management.

5.1. San Diego Rural Fire Protection District

The District argues that the record does not support a finding of considerations that override the project's significant and unavoidable impacts because, when implemented, Mitigation Measures FF-3 and FF-4 may lessen the fire and fuels management impacts to less than significant. We disagree. As discussed previously, the EIR/EIS appropriately determines that, notwithstanding Mitigation Measures FF-3 and FF-4, there may be unavoidable fire and fuels management impacts. Accordingly, it is appropriate for the Commission to consider those potential impacts in weighing whether to approve the project.

5.2. Public Comment

We acknowledge the many public comments addressing the merits of the project. Specifically, at the public participation hearing conducted on January 24, 2012, in Jacumba, California, seventeen people spoke, and one person submitted a written statement, in opposition to the project, while 16 people spoke, and one person submitted a written statement, in support of the project. Most of the speakers opposing the project raised objections on the basis of the project's environmental impacts on recreation (camping, hiking, and off-road vehicle), scenic vistas, biological resources (in particular, golden eagles), fire safety (prevention and fire-fighting), noise and vibration (construction and operational), public health and safety (EMF effects, shadow flicker and light) and well water. Ten of the speakers opposing the project raised objections that the project benefits urban and corporate interests at the expense of local property values and quality of life. Six of the speakers opposing the project challenged the

need for the project on the basis of electrical demand, the availability of distributed generation as an alternative to the project, and/or the inefficiency of wind power due to the requirement for back-up power. Sixteen people spoke, and one person submitted a written statement, in support of the project, commenting on the role of the project in enabling the deployment of wind and solar energy resources; three speakers commented on the need to reduce global warming; and five speakers commented on job creation attributable to the project.

We are mindful of the environmental cost of this project. Nevertheless, on balance, and for all the reasons discussed above, we find that there are overriding considerations that merit project approval despite its environmental impacts.

6. EMF

The Commission has examined EMF impacts in several previous proceedings.⁴ We found the scientific evidence presented in those proceedings was uncertain as to the possible health effects of EMFs and we did not find it appropriate to adopt any related numerical standards. Because there is no agreement among scientists that exposure to EMF creates any potential health risk, and because CEQA does not define or adopt any standards to address the potential health risk impacts of possible exposure to EMFs, the Commission does not consider magnetic fields in the context of CEQA and determination of environmental impacts.

⁴ See D.06-01-042 and D.93-11-013.

However, recognizing that public concern remains, we do require, pursuant to GO 131-D, Section X.A, that all requests for a permit to construct include a description of the measures taken or proposed by the utility to reduce the potential for exposure to EMFs generated by the proposed project. We developed an interim policy that requires utilities, among other things, to identify the no-cost measures undertaken, and the low-cost measures implemented, to reduce the potential EMF impacts. The benchmark established for low-cost measures is 4% of the total budgeted project cost that results in an EMF reduction of at least 15% (as measured at the edge of the utility right-of-way).

SDG&E filed a Magnetic Field Management Plan (MFMP) as an attachment to its August 10, 2009, application, based on its preferred project alternative and, pursuant to order of the administrative law judge, supplemented the MFMP to address the environmentally superior alternative identified in the draft EIR/EIS and impacts on 25 identified residences within 1,000 feet of the project route. The MFMP provides that the project will use phasing to reduce magnetic field levels. Undergrounding of portions of the 138 kV transmission line under the environmentally superior alternative would further reduce magnetic fields in the vicinity of 19 of the 25 residences identified in the draft EIR/EIS by reducing conductor spacing and arranging the underground conductors to use cancellation as an additional reduction measure. While also a low-cost measure, raising structures' heights in the vicinity of the remaining six residences along the entire project length (e.g., at the Southwest Powerlink crossing and at the east end of a private air strip) does not appear to be feasible and could potentially necessitate the installation of marker balls and lights, which might create additional environmental impacts. There are no further

feasible low-cost field reduction measures that can be implemented on this project. This design complies with the Commission's EMF decisions.

No party challenged SDG&E's supplemental MFMP on compliance with the Commission's EMF decisions. Although BAD presented evidence challenging the sufficiency of the original August 10, 2009, MFMP (Ex. 3), it did not submit testimony in response to SDG&E's supplemental MFMP as permitted by the administrative law judge's ruling at the May 2, 2011, evidentiary hearing (Tr. 105) or raise the issue in closing briefs.

7. Comments on Proposed Decision

The proposed final decision of ALJ Hallie Yacknin in this matter was mailed to the parties in accordance with Pub. Util. Code § 311 and comments were allowed pursuant to Rule 14.3 of the Commission's Rules of Practice and Procedure. SDG&E and BAD filed opening comments on June 6, 2012, and reply comments on June 11, 2012.

SDG&E recommends that the proposed decision's discussion of feasibility of the partial undergrounding of the 138 kV transmission line be revised to find feasibility on the basis of the weighing of the environmental benefits of the mitigation measure against its economic cost pursuant to Pub. Res. Code § 21081(a)(3). To the contrary, while environmental factors are relevant for the purpose of identifying potentially feasible mitigation measures and project alternatives in the EIR pursuant to CEQA Guideline § 15126.6(a), they do not support an agency's finding that an identified potentially feasible mitigation measure or alternative is ultimately infeasible (or feasible) pursuant to Pub. Res. Code § 21081(a)(3) and CEQA Guideline § 15091(a)(3). An agency may find an identified mitigation measure or alternative to be infeasible for "[s]pecific economic, legal, social, technological, or other considerations." (*Id.*) It may not

reject a mitigation measure as infeasible on the basis of the relative weight that it gives to the significant environmental impact that the mitigation measure would mitigate or eliminate. Indeed, it would undercut the very premise of CEQA were agencies at liberty to do so.⁵

SDG&E asserts that, in citing to *Maintain Our Desert Environment* for the proposition that a mitigation measure is not economically infeasible if the project can be successfully accomplished notwithstanding the greater costs of the mitigation measure, the proposed decision errs in “applying a judicial test for private projects to public utility projects.” (SDG&E comments at 5.) SDG&E cites to D.09-07-024 for the proposition that, in the context of a public utility project, the impact on rates is a relevant consideration for judging the feasibility of alternatives and asserts that, in so holding, D.09-07-024 rejected the economic feasibility test. To the contrary, D.09-07-024 did not reject any “judicial test for private projects” or adopt a different economic test for public utility projects. Rather, D.09-07-024 affirmed that the impact on rates is an additional, relevant consideration in the determination of the infeasibility of a mitigation measure or alternative. While we do not reject the economic feasibility test of *Maintain our Desert Environment* as SDG&E advocates, we revise the proposed decision to acknowledge that, although there is no evidence here that the rate impact

⁵ SDG&E cites to *City of Del Mar v. City of San Diego* (1982) 133 Cal. App. 3d 401 at 417, and to later authority that favorably cites to that decision, for the proposition that environmental factors may also be weighed in determining whether a mitigation measure or project alternative is infeasible. However, to the extent that this proposition can be found in those cases, it is dicta because *Del Mar* and the other cited authority rely on economic, social, and/or policy considerations, not environmental factors, as the basis for finding a mitigation measure or alternative to be infeasible.

renders the undergrounding measure infeasible, it is an additional, relevant consideration.

SDG&E recommends that the proposed decision be modified to delete the suggestion that the Commission might not have the authority to approve a project, notwithstanding its significant and unavoidable environmental impacts, on the basis of the value of matters outside of the Commission's regulatory jurisdiction. SDG&E does not identify legal error, and we see no need to adopt its recommendation.

SDG&E recommends that the proposed decision be modified to give Energy Division broader authority to approve changes to the approved project during construction. SDG&E does not identify legal error, and we see no need to adopt its recommendation.

SDG&E identifies several typographical errors, which we correct.

BAD identifies an error in the proposed decision's characterization of the final EIR/EIS, as opposed to the draft EIR/EIS, as identifying the number of residences within 1,000 feet of the 138 kV transmission line right of way route as 25, which we correct.

BAD asserts that the proposed decision errs in finding that SDG&E's MFMP is consistent with the Commission's EMF policies because the MFMP was prepared in advance of the final EIR/EIS, which amended the draft EIR/EIS to re-route a portion of the 138 kV transmission line in the environmentally superior alternative. To the contrary, the fact that the final EIR/EIS identifies (and this decision approves) a slightly different route does not render the MFMP inconsistent with the Commission's EMF policies. In addition, GO 131-D imposes an ongoing obligation on SDG&E to revise the MFMP as necessary to

ensure that the final plan remains consistent with the Commission's EMF policies.

8. Assignment of Proceeding

Mark J. Ferron is the assigned Commissioner and Hallie Yacknin is the assigned ALJ in this proceeding.

Findings of Fact

1. The EIR/EIS, which was certified by the Commission in D.12-04-022, identifies the environmentally superior project alternative, other than the "no project" alternative, as the ECO Substation Alternative combined with the ECO Partial Underground 138 kV Transmission Route Alternative, Tule Wind Alternative 5 (reduction in turbines) combined with Tule Wind Alternative 2 (underground the 138 kV transmission line from the operations and maintenance and collector substation facilities co-located on Rough Acres Ranch), and the ESJ Gen-Tie Overhead Alternative Alignment. The EIR/EIS identified mitigation measures that would eliminate or lessen the project's adverse environmental impact; those measures are identified in the MMCRP attached to this order. The EIR/EIS determines that, notwithstanding these mitigation measures, the environmentally superior project alternative will have significant and unmitigable adverse impacts on biological resources, air resources, cultural resources, noise and visual resources.

2. The Commission has reviewed and considered the information contained in the EIR/EIS.

3. The EIR/EIS reflects the Commission's independent judgment and analysis.

4. The ECO Substation project will enable the Tule Wind Project to interconnect to the CAISO-controlled transmission grid, aiding in progress

towards federal and state greenhouse gas reduction and renewable electricity goals, including the requirements set forth in SB 1078 (California Renewable Portfolio Standard Program), AB 32 (California Global Warming Solutions Act of 2006), the Governor's Executive Order S-14-08 to increase the state's Renewable Energy Standard to 33% renewable energy by 2020, and Title XVII, Section 1705, of the Energy Policy Act of 2005 (authorizing a new program for rapid deployment of, among other things, renewable energy projects).

5. The ECO Substation project will improve the reliability of electric service to the local communities.

6. SDG&E's MFMP incorporates all feasible no-cost and low-cost measures to reduce potential EMF impacts by placing major substation electrical equipment (such as transformers, switchracks, buses and underground duct banks) away from the substation property lines, and arranging the conductors of the proposed transmission line segments for magnetic field reduction along adjacent transmission corridors.

Conclusions of Law

1. In the event that the BLM and/or other permitting authorities approve Tule Wind Project and/or ESJ Gen-Tie Project components other than Tule Wind Alternative 5 (reduction in turbines) combined with Tule Wind Alternative 2 (underground the 138 kV transmission line from the operations and maintenance and collector substation facilities co-located on Rough Acres Ranch), and the ESJ Gen-Tie Overhead Alternative Alignment, the environmentally superior alternative for these components will be legally infeasible.

2. The contribution of the ECO Substation Project to California's progress towards federal and state greenhouse gas reduction and renewable electricity

goals, and the increased reliability of electric service to the local communities, are overriding considerations that support our approval of it, despite its significant unavoidable impacts on biological resources, air resources, cultural resources, noise, visual resources, and fire and fuels management.

3. SDG&E's MFMP is consistent with the Commission's EMF policy for implementing no-cost and low-cost measures to reduce potential EMF impacts.

4. SDG&E should be granted a permit to construct the ECO Substation Project, configured as the ECO Substation Alternative combined with the ECO Partial Underground 138 kV Transmission Route Alternative, in compliance with the MMCRP attached to this order.

5. Application 09-08-003 should be closed.

O R D E R

IT IS ORDERED that:

1. San Diego Gas & Electric Company is granted a permit to construct the East County Substation Project, configured to include the East County (ECO) Substation Alternative Site combined with the ECO Partial Underground 138 kilovolt Transmission Route Alternative, in compliance with the Mitigation Monitoring, Compliance, and Reporting Plan included as part of the final Environmental Impact Report/Environmental Impact Statement and attached to this order.

2. The Mitigation Monitoring, Compliance, and Reporting Plan, included as part of the final Environmental Impact Report/Environmental Impact Statement and attached to this order as an attachment, is adopted.

3. Energy Division may approve requests by San Diego Gas & Electric Company (SDG&E) for minor project refinements that may be necessary due to

final engineering of the East County Substation Project so long as such minor project refinements are located within the geographic boundary of the study area of the Environmental Impact Report/Environmental Impact Statement and do not, without mitigation, result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the environmental document; conflict with any mitigation measure or applicable law or policy; or trigger an additional permit requirement. SDG&E shall seek any other project refinements by a petition to modify this decision.

4. Application 09-08-003 is closed.

This order is effective today.

Dated June 21, 2012, at San Francisco, California.

MICHAEL R. PEEVEY
President
TIMOTHY ALAN SIMON
MICHEL PETER FLORIO
CATHERINE J.K. SANDOVAL
MARK J. FERRON
Commissioners

ATTACHMENT

East County Substation Project

**MITIGATION MONITORING, COMPLIANCE
AND REPORTING PLAN**

**Table D.2-12
Mitigation Monitoring, Compliance, and Reporting – ECO Substation Project – Biological Resources**

Mitigation Measure	BIO-1a. Confine all construction and construction-related activities to the minimum necessary area as defined by the final engineering plans. All construction areas, access to construction areas, and construction-related activities shall be strictly limited to the areas identified on the final engineering plans. The limits of the approved work space shall be delineated with stakes and/or flagging that shall be maintained throughout the construction period. An environmental monitor shall complete regular observations to ensure that all work is completed within the approved work limits, and in the event any work occurs beyond the approved limits, it shall be reported. During and after construction, entrances to access roads shall be gated to prevent the unauthorized use of these construction access roads by the general public. Signs prohibiting unauthorized use of the access roads shall be posted on these gates. In addition, to control unauthorized use of project access roads by off-road vehicle enthusiasts, the applicants shall provide funding to land management entities responsible for areas set aside for habitat conservation to provide for off-road vehicle enforcement patrols. The responsible land management entities will formulate what funding is reasonable to control unauthorized use of project access roads.
Location	All areas disturbed by construction activities.
Monitoring/Reporting Action	CPUC/ BLM to review final engineering plans and verify in the field that approved work limits are clearly delineated on the final engineering plans. An environmental monitor to ensure proper installation and maintenance of construction fencing and signage during construction. Environmental monitor to report to CPUC whether any work occurred outside of the approved work limits.
Effectiveness Criteria	Field verification that delineated construction areas correspond with final plans.
Responsible Agency	BLM and CPUC
Timing	Confirm implementation prior to any vegetation clearing or ground disturbance activities and throughout the construction period.
Mitigation Measure	BIO-1b. Conduct contractor training for all construction staff. Prior to construction, all developer, contractor, and subcontractor personnel shall receive training regarding the appropriate work practices necessary to implement the mitigation measures and comply with environmental regulations, including plant and wildlife species avoidance, impact minimization, and best management practices. Sign-in sheets and hard hat decals shall be provided that document contractor training has been completed for construction personnel.
Location	All areas disturbed by construction activities
Monitoring/Reporting Action	CPUC environmental monitor shall oversee construction monitoring to ensure biological impacts are avoided or minimized, and ensure that appropriate work practices necessary to implement the mitigation measures are implemented.
Effectiveness Criteria	Successful avoidance of unforeseen impacts and compliance with APMs and mitigation measures.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction.
Mitigation Measure	BIO-1c. Conduct biological construction monitoring. An authorized biological monitor must be present at the construction sites during all ground disturbing and vegetation removal activities. The monitor shall survey the construction sites and surrounding areas for compliance with all environmental specifications. Weekly biological construction monitoring reports shall be prepared and submitted to the appropriate permitting and responsible agencies through the duration of the ground disturbing and vegetation removal construction phase. Monthly biological construction monitoring reports shall be prepared and submitted through the duration of project construction to document compliance with environmental requirements.
Location	All areas disturbed by construction activities.

Monitoring/Reporting Action	Weekly/Monthly biological construction monitoring reports submitted to BLM and CPUC.
Effectiveness Criteria	Identification of issues and solutions through regular monitoring and reporting. The qualifications of the qualified biologist shall be approved by BLM and CPUC.
Responsible Agency	BLM and CPUC
Timing	Weekly biological monitoring during ground disturbance and vegetation removal activities; Monthly biological monitoring for the remaining duration of construction.
Mitigation Measure	BIO-1d. Restore all temporary construction areas pursuant to a Habitat Restoration Plan. All temporary work areas not subject to long-term use or ongoing vegetation maintenance shall be revegetated with native species characteristic of the adjacent native vegetation communities in accordance with a Habitat Restoration Plan. A habitat restoration specialist will be designated and approved by the California Public Utilities Commission and Bureau of Land Management and will determine the most appropriate method of restoration. Restoration techniques may include: hydroseeding, hand-seeding, imprinting, and soil and plant salvage. Any salvage and relocation of species considered desert native plants shall be conducted in compliance with the California Desert Native Plant Act. The Habitat Restoration Plan shall include success criteria and monitoring specifications and shall be approved by the permitting agencies prior to construction of the project. At the completion of project construction, all construction materials shall be completely removed from the site. All temporary construction access roads shall be permanently closed and restored. Topsoil located in areas to be restoration would be conserved and stockpiled during the excavation process for use in the restoration. Wherever possible, vegetation would be left in place to avoid excessive root damage to allow for natural recruitment following construction. Temporary impacts shall be restored sufficient to compensate for the impact to the satisfaction of the CPUC or BLM (depending on the location of the impact). If restoration of temporary impact areas is not possible to the satisfaction of the CPUC or BLM, the temporary impact shall be considered a permanent impact and compensated accordingly (see MM BIO-1e).
Location	All areas disturbed by construction activities.
Monitoring/Reporting Action	BLM and CPUC shall review habitat restoration plans, habitat acquisition plans, and long-term habitat management plans, and ensure their implementation. BLM/CPUC biological monitor shall confirm that proposed habitat restoration mitigation plans are implemented.
Effectiveness Criteria	Habitat restoration plans are implemented and meet success criteria. Long-term habitat management is provided for all mitigation sites.
Responsible Agency	BLM and CPUC
Timing	Plan submitted to CPUC /BLM for review 90 days prior to ground disturbance activities. Restoration will be initiated at earliest opportunity upon completion of soil-disturbing activities.
Mitigation Measure	BIO-1e. Provide habitat compensation or restoration for permanent impacts to native vegetation communities. Permanent impact to all native vegetation communities shall be compensated through a combination habitat compensation and habitat restoration at a minimum of a 1:1 ratio or as required by the permitting agencies. Habitat compensation shall be accomplished through agency-approved land preservation or mitigation fee payment for the purpose of habitat compensation of lands supporting comparable habitats to those lands impacted by the ECO Substation Project. Land preservation or mitigation fee payment for habitat compensation must be completed within 18 months of permit issuance. Habitat restoration may be appropriate as compensation for permanent impacts provided that restoration is demonstrated to be feasible and the restoration effort is implemented pursuant to a Habitat Restoration Plan, which includes success criteria and monitoring specifications as described above for Mitigation Measure BIO-1d. The Habitat Restoration Plan shall be approved by the permitting agencies prior to construction of the project. All habitat compensation and restoration used as mitigation for the ECO Substation Project on public lands shall be located in areas designated for resource protection and management. All habitat compensation and restoration used as mitigation for the ECO Substation Project on private lands shall include long-term management and legal protection assurances.

Location	On the ECO Substation Project site or on to-be-identified mitigation parcels.
Monitoring/Reporting Action	Habitat restoration plans are implemented and meet success criteria. Long-term habitat management is provided for all mitigation sites.
Effectiveness Criteria	For habitat preservation, it shall meet the minimum compensation standards on an acre-for-acre, in-kind basis or as otherwise required by the agencies. For habitat restoration, the habitat restoration plan shall specify success criteria. Long-term management assurances and legal protection mechanisms shall satisfy agency requirements.
Responsible Agency	BLM and CPUC
Timing	Habitat mitigation lands shall be identified and approved within 1 year of the initiation of project construction. Long-term management and legal protection for mitigation lands shall be in place no later than 18 months after the initiation of project construction. Habitat restoration plan(s), if applicable, shall be submitted to CPUC/ BLM for review within 1 year of the initiation of project construction. Restoration, if applicable, shall be initiated no later than 18 months after the initiation of project construction.
Mitigation Measure	BIO-1f. Implement fire prevention best management practices during construction and operation activities. Fire prevention best management practices shall be implemented during construction and operation of the project as specified by the Construction Fire Prevention/Protection Plan (to be developed as required under Mitigation Measure FF-1) and Wildland Fire Prevention and Fire Safety Electric Standard Practice Operation and Maintenance Plan (to be revised as required under Mitigation Measure FF-2).
Location	All areas disturbed by construction activities.
Monitoring/Reporting Action	CPUC and BLM will review SDG&E's Construction Fire Prevention/Protection Plan and ensure its implementation.
Effectiveness Criteria	Implementation of the plan. Limit work during Red Flag Warnings and Very High PAL. Provide evidence of coordination with applicable fire authorities.
Responsible Agency	BLM and CPUC
Timing	Plan effective throughout construction.
Mitigation Measure	BIO-1g. Prepare and implement a Stormwater Pollution Prevention Plan. Prepare a Stormwater Pollution Prevention Plan pursuant to the specifications described in Mitigation Measure HYD-1.
Location	All areas disturbed by construction activities
Monitoring/Reporting Action	BLM and CPUC will review SDG&E's SWPPP and ensure its implementation.
Effectiveness Criteria	Construction and BMPs in place during construction, and kept operating as long as needed. Mitigation measure is effective if water quality near the project is maintained.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction.
Mitigation Measure	BIO-2a. Limit temporary and permanent impacts to jurisdictional features to the minimum necessary as defined by the final engineering plans. Obtain and implement the terms and conditions of agency permit(s) for unavoidable impacts to jurisdictional wetlands and waters. All construction areas, access to construction areas, and construction-related activities shall be strictly limited to the areas within the approved work limits identified on the final engineering plans. The limits of the approved work space shall be delineated with stakes and/or flagging that shall be maintained throughout the construction period. The project applicant shall obtain applicable permits and provide evidence of permit approval, which may include but not be limited to a Clean Water Act Section 404 Permit, a Clean Water Act Section 401 water quality certification, and a Section 1602 streambed alteration agreement with the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Game for impacts to jurisdictional features prior to project construction. The terms and conditions of these authorizations shall be implemented.
Location	All areas disturbed by construction activities.
Monitoring/Reporting Action	BLM/CPUC to review final engineering plans. Third party monitors to verify proper installation of construction fencing and signage. SDG&E provide evidence that applicable

	permits have been obtained. CPUC/ BLM to document compliance two weeks prior to ground disturbance activities.
Effectiveness Criteria	Field verification that delineated construction areas correspond with final plans. Documentation of permit compliance to be provided to CPUC and BLM.
Responsible Agency	BLM and CPUC
Timing	Prior to any vegetation clearing or ground disturbance activities.
Mitigation Measure	BIO-2b. Implement habitat creation, enhancement, preservation, and/or restoration pursuant to a wetland mitigation plan to ensure no net loss of jurisdictional waters and wetlands. Temporary and permanent impacts to all jurisdictional resources shall be compensated through a combination habitat creation (i.e., establishment), enhancement, preservation, and/or and restoration at a minimum of a 1:1 ratio or as required by the permitting agencies. Any creation enhancement, preservation, and/or restoration effort shall be implemented pursuant to a Habitat Restoration Plan, which shall include success criteria and monitoring specifications and shall be approved by the permitting agencies prior to construction of the project. A habitat restoration specialist will be designated and approved by the permitting agencies and will determine the most appropriate method of restoration. Restoration techniques may include hydroseeding, hand-seeding, imprinting, and soil and plant salvage. Temporary impacts shall be restored sufficient to compensate for the impact to the satisfaction of the CPUC or BLM (depending on the location of the impact). If restoration of temporary impact areas is not possible to the satisfaction of the CPUC or BLM, the temporary impact shall be considered a permanent impact and compensated accordingly. All habitat creation and restoration used as mitigation for the Proposed ECO Substation Project on public lands shall be located in areas designated for resource protection and management. All habitat creation and restoration used as mitigation for the project on private lands shall include long-term management and legal protection assurances.
Location	Identified habitat creation and/or restoration areas on the ECO Substation Project site or at off-site mitigation parcel(s)
Monitoring/Reporting Action	Habitat restoration plans are implemented and meet success criteria. Long-term habitat management is provided for all mitigation sites.
Effectiveness Criteria	The habitat restoration plan shall specify success criteria. Long-term management assurances and legal protection mechanisms shall satisfy agency requirements.
Responsible Agency	BLM and CPUC
Timing	If off-site mitigation lands are utilized, they shall be identified and approved within 1 year of the initiation of project construction. Long-term management and legal protection for mitigation lands shall be in place no later than 18 months after the initiation of project construction. Habitat restoration plan(s) shall be submitted to CPUC/ BLM for review within 1 year of the initiation of project construction. Restoration shall be initiated no later than 18 months after the initiation of project construction.
Mitigation Measure	BIO-2c. Where drainage crossings are unavoidable, construct access roads at right angles to drainages. Unless not possible due to existing landforms or site constraints, access roads shall be built perpendicular to drainages to minimize the impacts to these resources and prevent impacts along the length of jurisdictional features.
Location	All drainage crossing in the ECO Substation Project area.
Monitoring/Reporting Action	CPUC/BLM to review final engineering plans to ensure measure is implemented to the extent feasible.
Effectiveness Criteria	Ensure access roads are built perpendicular to drainages to the extent feasible.
Responsible Agency	BLM and CPUC
Timing	Prior to and during construction.
Mitigation Measure	BIO-3a. Prepare and implement a Noxious Weeds and Invasive Species Control Plan. A Noxious Weeds and Invasive Species Control Plan shall be prepared and reviewed by the California Public Utilities Commission/Bureau of Land Management and applicable permitting agencies. On BLM lands, the plan shall be consistent with an Integrated Pest

	Management approach per the Vegetation Treatments on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Report (2007). The plan shall be implemented during all phases of project construction and operation. The plan shall include best management practices to avoid and minimize the direct or indirect effect of the establishment and spread of invasive plant species during construction. Implementation of specific protective measures shall be required during construction, such as cleaning vehicles prior to off-road use, using weed-free imported soil/material, restricted vegetation removal and requiring topsoil storage. Development and implementation of weed management procedures shall be used to monitor and control the spread of weed populations along the construction access and transmission line right-of-ways. Vehicles used in transmission line construction shall be cleaned prior to operation off of maintained roads. Existing vegetation shall be cleared only from areas scheduled for immediate construction work and only for the width needed for active construction activities. Noxious weed management shall be conducted annually to prevent the establishment and spread of invasive plant species. This shall include weed abatement efforts, targeted at plants listed as invasive exotics by the California Exotic Plant Pest Council in their most recent "A" or "Red Alert" list. Only herbicides approved by BLM in California will be used on BLM lands. Herbicide application can only occur on BLM lands with an approved Pesticide Use Proposal (PUP). Pesticide use should be limited to non-persistent pesticides and should only be applied in accordance with label and application permit directions and restrictions for terrestrial and aquatic applications.
Location	Entire project area.
Monitoring/Reporting Action	BLM and CPUC to verify that plan has been submitted and is implemented. Evidence provided to BLM/CPUC that the plan has been reviewed by applicable permitting agencies.
Effectiveness Criteria	Noxious Weeds and Invasive Species Control Plan prepared and successfully implemented.
Responsible Agency	BLM/CPUC
Timing	Plan submitted to BLM, CPUC and applicable permitting agencies for review 90 days prior to initiation of project construction. Plan shall be implemented throughout construction and throughout operations.
Mitigation Measure	BIO-4a. Prepare and implement a Dust Control Plan. The project proponent shall (a) pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas if construction activity causes persistent visible emissions of fugitive dust beyond the work area; (b) pre-water sites up to 48 hours in advance of clearing to control fugitive dust; (c) reduce the amount of disturbed area where feasible; (d) spray all dirt stock-pile areas daily as needed; (e) cover loads in haul trucks or maintain at least 6 inches of free-board when traveling on public roads; (f) pre-moisten, prior to transport, import and export dirt, sand, or loose materials; (g) sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets or wash trucks and equipment before entering public streets; (h) plant vegetative ground cover in disturbed areas to meet the criteria of the revegetation plan; (i) apply chemical soil stabilizers or apply water to form and maintain a crust on inactive construction areas (disturbed lands that are unused for 14 consecutive days); and (j) prepare and file with the San Diego Air Pollution Control District, Bureau of Land Management and California Public Utilities Commission a Dust Control Plan that describes how these measures would be implemented and monitored at all locations of the project. This plan shall be developed consistent with the requirements of Mitigation Measure AQ-1.
Location	All construction areas including staging areas.
Monitoring/Reporting Action	Review Dust Control Plan. Verify local air district concurrence with the Plan. Inspect activities for dust control.
Effectiveness Criteria	Dust emissions are reduced. Effectiveness can be monitored by monitoring implementation of the control measures.
Responsible Agency	BLM and CPUC
Timing	Plan submitted to BLM and CPUC for review 90 days prior to initiation of project construction. Evidence shall also be provided that SDG&E has submitted the plan for review

	to SDPACD. Plan shall be implemented throughout construction.
Mitigation Measure	BIO-5a. Install fencing or flagging around identified special-status plant species populations in the construction areas. Prior to the start of construction, a qualified biologist shall conduct focused surveys during the appropriate blooming period for special-status plant species for all construction areas. All of the special-status plant locations shall be recorded using a Global Positioning System (GPS), which will be used to site the avoidance fencing/flagging. Special-status plant species shall be avoided to the maximum extent possible by all construction activities. The boundaries of all special-status plant species to be avoided shall be delineated in the field with clearly visible fencing or flagging. The fencing/flagging shall be maintained for the duration of project construction activities.
Location	All areas disturbed by construction activities.
Monitoring/Reporting Action	BLM/CPUC monitor to ensure construction fencing has been installed at necessary locations based on the results of the focused surveys for special-status plant species. The results of the focused surveys for special-status plant species are to be provided to CPUC/BLM by a qualified biologist within 48 hours of completing the survey.
Effectiveness Criteria	Field verification that delineated plant populations are consistent with baseline data and focused surveys. The qualifications of the qualified biologist shall be approved by the CPUC.
Responsible Agency	BLM and CPUC
Timing	Prior to any vegetation clearing or ground disturbance activities.
Mitigation Measure	BIO-5b. Implement special-status plant species compensation. Impacts to special-status plant species shall be maximally avoided. Where impacts to special-status plant species are unavoidable, the impact shall be quantified and compensated through off-site land preservation and/or plant salvage and relocation. Where off-site land preservation is biologically preferred, the land shall contain comparable special-status plant resources as the impacted lands and shall include long-term management and legal protection assurances to the satisfaction of the CPUC or BLM. Land preservation must be completed within 18 months of permit issuance. Where salvage and relocation is demonstrated to be feasible and biologically preferred, it shall be conducted pursuant to an agency-approved plan that details the methods for salvage, stockpiling, and replanting, as well as the characteristics of the receiver sites. Any salvage and relocation plans shall be approved by the permitting agencies prior to project construction. Any salvage and relocation of species considered desert native plants shall be conducted in compliance with the California Desert Native Plant Act. Success criteria and monitoring shall also be included in the plan. If salvage and relocation is not possible to the satisfaction of the CPUC or BLM, off-site land preservation shall be required.
Location	All areas disturbed by construction activities.
Monitoring/Reporting Action	BLM and CPUC shall review habitat restoration plans, habitat acquisition plans, and long-term habitat management plans, and ensure their implementation. CPUC/BLM biological monitor shall confirm that proposed habitat restoration mitigation plans are implemented.
Effectiveness Criteria	For habitat preservation, it shall meet the minimum compensation standards on an acre-for-acre or population basis or as otherwise required by the agencies. For salvage and relocation, the agency approved plan shall specify success criteria. Long-term management assurances and legal protection mechanisms shall satisfy agency requirements.
Responsible Agency	BLM and CPUC
Timing	Habitat mitigation lands shall be identified and approved within 1 year of the initiation of project construction. Long-term management and legal protection for mitigation lands shall be in place no later than 18 months after the initiation of project construction. Salvage and relocation plan(s), if applicable, shall be submitted to CPUC/ BLM for review 90 days prior to the initiation of project construction. Salvage and relocation, if applicable, shall be initiated during project construction.
Mitigation Measure	BIO-7a. Cover and/or provide escape routes for wildlife from excavated areas and monitor these areas daily. All steep trenches and excavations during construction shall be inspected twice daily (i.e., morning and evening) by a qualified biologist to monitor for wildlife

	entrapment. Large/steep excavations shall be covered and/or fenced nightly to prevent wildlife entrapment. Excavations shall provide an earthen ramp to allow for a wildlife escape route.
Location	All construction excavations and trenches
Monitoring/Reporting Action	Verification of measure implementation shall be provided to CPUC/ BLM by biological construction monitor. CPUC/BLM monitor to verify measure is being implemented during construction.
Effectiveness Criteria	Biological construction monitoring observations, reporting, and coordination/communication with construction personnel.
Responsible Agency	BLM and CPUC
Timing	During all subsurface construction activities.
Mitigation Measure	BIO-7b. Enforce speed limits in and around all construction areas. Vehicles shall not exceed 15 miles per hour on unpaved roads and the right-of-way accessing the construction site or 10 miles per hour during the night.
Location	All construction areas and access ways of the ECO Substation Project area.
Monitoring/Reporting Action	Verification of establishment and enforcement mechanisms shall be provided to BLM/CPUC. BLM/CPUC to ensure speed limits are reduced to within permitted limits during construction.
Effectiveness Criteria	Contractor training and biological construction monitoring oversight and field observations.
Responsible Agency	BLM and CPUC
Timing	During all construction activities.
Mitigation Measure	BIO-7c. Minimize night construction lighting adjacent to native habitats. Lighting of construction areas at night shall be the minimum necessary for personnel safety and shall be low illumination, selectively placed, and directed/shielded appropriately to minimize lighting in adjacent native habitats.
Location	All construction areas adjacent to native vegetation
Monitoring/Reporting Action	Verification of night lighting specifications to be provided to BLM/CPUC. The specifications shall include light placement, illumination, and direction light will be oriented. BLM/CPUC environmental monitors to verify that night lighting adjacent to native habitats is minimized.
Effectiveness Criteria	BLM/CPUC to ensure that commitments have been incorporated into construction contract specifications. An environmental monitor to inspect periodically to ensure correct placement of lighting to prevent night lighting impacts to sensitive habitats.
Responsible Agency	BLM and CPUC
Timing	During construction.
Mitigation Measure	BIO-7d. Prohibit littering and remove trash from construction areas daily. Littering shall not be allowed by the project personnel. All food-related trash and garbage shall be removed from the construction sites on a daily basis.
Location	All construction areas
Monitoring/Reporting Action	Verification littering and trash control measures have been included in the project contractor specifications and is presented as part of the environmental awareness training. Documentation of compliance with this measure shall be provided to BLM/CPUC throughout construction.
Effectiveness Criteria	BLM/CPUC to ensure that commitments have been incorporated into construction contract specifications. An environmental monitor to inspect periodically to ensure measures are being implemented to remove litter and trash from the construction area on a daily basis
Responsible Agency	BLM and CPUC
Timing	During construction.
Mitigation Measure	BIO-7e. Prohibit the harm, harassment, collection of, or feeding of wildlife. Project personnel shall not harm, harass, collect, or feed wildlife. No pets shall be allowed in the construction areas.
Location	All construction areas
Monitoring/Reporting Action	Verification that appropriate measures have been included in the project contractor specifications and are presented as part of the environmental awareness training. Documentation of compliance with this measure shall be provided to BLM/CPUC throughout

	construction.
Effectiveness Criteria	BLM/CPUC to ensure that commitments have been incorporated into construction contract specifications. BLM/CPUC to inspect periodically to ensure measures are being implemented.
Responsible Agency	BLM and CPUC
Timing	During construction.
Mitigation Measure	BIO-7f. Obtain and implement the terms of agency permit(s) with jurisdiction federal or state listed species. If determined necessary, the applicant shall obtain a biological opinion through Section 7 consultation between the Bureau of Land Management and U.S. Fish and Wildlife Service for impacts to federally listed wildlife species and a Section 2081 permit (or consistency determination) from the California Department of Fish and Game for impacts to state listed wildlife species resulting from this project, if applicable. The terms and conditions included in these authorizations shall be implemented, which may include seasonal restrictions, relocation, monitoring/reporting specifications, and/or habitat compensation through restoration or acquisition of suitable habitat.
Location	Terms and conditions of permits may apply anywhere within the ECO Substation Project site or on off-site mitigation parcels, but would mostly relate to the occupied Quino checkerspot butterfly habitat areas and the designated critical habitat for Quino checkerspot butterfly.
Monitoring/Reporting Action	Issued Section 7 biological opinion to be provided to CPUC/ BLM to document compliance.
Effectiveness Criteria	Biological construction monitoring and reporting to provide documentation of permit compliance. Criteria for effectiveness to be identified in permit.
Responsible Agency	BLM and CPUC
Timing	Prior to any vegetation clearing or ground disturbance activities in or around suitable Quino checkerspot butterfly habitat or designated Quino checkerspot butterfly critical habitat.
Mitigation Measure	BIO-7g. Conduct protocol surveys for Quino checkerspot butterfly within 1 year prior to project construction activities in occupied habitat. SDG&E shall conduct pre-construction protocol surveys for Quino checkerspot butterfly within 1 year prior to construction activities, or as required by U.S. Fish and Wildlife Service, in any area known to support the species. Surveys shall be conducted by a qualified, permitted biologist in accordance with the most currently accepted protocol survey method. Results shall be reported to the U.S. Fish and Wildlife Service within 45 days of the completion of the survey. The surveys that were conducted in the spring of 2010 will be valid for construction in 2012 so long as construction commences before May 2012. If construction is not scheduled to commence before May 2012, SDG&E will contact the U.S. Fish and Wildlife Service to discuss whether an additional survey is warranted.
Location	Occupied Quino checkerspot butterfly habitat along the 138 kV transmission line project component of the ECO Substation Project area.
Monitoring/Reporting Action	Submittal of 45-day report to USFWS, CPUC, and BLM.
Effectiveness Criteria	Surveys to be conducted pursuant to accepted protocol survey method by qualified, permitted biologist.
Responsible Agency	BLM and CPUC
Timing	Within 1 year of the initiation of project construction in occupied habitat.
Mitigation Measure	BIO-7h. Provide compensation for temporary and permanent impacts to Quino checkerspot butterfly habitat through conservation and/or restoration. Temporary and permanent impact to Quino checkerspot butterfly shall be compensated through a combination of habitat compensation and habitat restoration at a minimum of a 2:1 mitigation ratio for non-critical habitat and a minimum of a 3:1 mitigation ratio for critical habitat, or as required by the permitting agencies. Habitat compensation shall be accomplished through U.S. Fish and Wildlife Service-approved land preservation or mitigation fee payment for the purpose of habitat compensation of lands supporting Quino checkerspot butterfly. Land preservation or mitigation fee payment for habitat compensation must be completed within 18 months of permit issuance. Habitat restoration may be appropriate as habitat compensation provided that the restoration effort is demonstrated to be feasible and

	implemented pursuant to a Habitat Restoration Plan, which shall include success criteria and monitoring specifications and shall be approved by the permitting agencies prior to project construction. All habitat compensation and restoration used as mitigation for the Proposed PROJECT on public lands shall be located in areas designated for resource protection and management. All habitat compensation and restoration used as mitigation for the Proposed PROJECT on private lands shall include long-term management and legal protection assurances.
Location	On the ECO Substation Project site or on to-be-identified mitigation parcels.
Monitoring/Reporting Action	CPUC/ BLM/USFWS to verify that habitat preservation and/or habitat restoration has been identified and implemented.
Effectiveness Criteria	For habitat preservation, it shall meet the minimum compensation standards on an acre-for-acre basis or as otherwise required by the agencies. For habitat restoration, the habitat restoration plan shall specify success criteria. Long-term management assurances and legal protection mechanisms shall satisfy agency requirements.
Responsible Agency	BLM and CPUC
Timing	Habitat mitigation lands shall be identified and approved within 1 year of the initiation of project construction. Long-term management and legal protection for mitigation lands shall be in place no later than 18 months after the initiation of project construction. Habitat restoration plan(s), if applicable, shall be submitted to CPUC/BLM for review within 1 year of the initiation of project construction. Restoration, if applicable, shall be initiated no later than 18 months after the initiation of project construction.
Mitigation Measure	BIO-7i. Final design of transmission towers and access roads through Quino checkerspot butterfly critical habitat shall maximally avoid host plants for Quino checkerspot butterfly. The final design of the ECO Project through Quino checkerspot butterfly habitat shall maximally avoid and minimize habitat resources used by the species. SDG&E shall explore alternate tower locations, reduced road widths, reduced vegetation maintenance, and other design modifications and obtain agency approval of the final design through this area.
Location	Occupied Quino checkerspot butterfly habitat along the 138 kV transmission line project component of the ECO Substation Project area.
Monitoring/Reporting Action	BLM/CPUC to approve final engineering plans to ensure impacts to critical habitat areas were avoided to the maximum extent feasible.
Effectiveness Criteria	Ensure final design maximizes avoidance of critical habitat to the extent feasible.
Responsible Agency	BLM and CPUC
Timing	Prior to any vegetation clearing or ground disturbance activities.
Mitigation Measure	BIO-7j. Conduct pre-construction nesting bird surveys and implement appropriate avoidance measures for identified nesting birds. If the project must occur during the avian breeding season (February 1st to August 31st, and as early as January 1 for some raptors), SDG&E should work with the California Department of Fish and Game (CDFG), Bureau of Land Management, and the U.S. Fish and Wildlife Service (USFWS) to prepare a Nesting Bird Management, Monitoring, and Reporting Plan (NBMMRP) to address avoidance of impacts to nesting birds. SDG&E will submit to the agencies the NBMMRP (see following for details) for review and approval prior to commencement of the project during the breeding season. The NBMMRP should include the following: <ol style="list-style-type: none"> 1. Nest Survey Protocols describing the nest survey methodologies 2. A Management Plan describing the methods to be used to avoid nesting birds and their nests, eggs, and chicks 3. A Monitoring and Reporting Plan detailing the information to be collected for incorporation into a regular Nest Monitoring Log (NML) with sufficient details to enable USFWS and CDFG to monitor SDG&E's compliance with Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 4. A schedule for the submittal (usually weekly) of the NML 5. Standard buffer widths deemed adequate to avoid or minimize significant project-

	<p>related edge effects (disturbance) on nesting birds and their nests, eggs, and chicks</p> <ol style="list-style-type: none"> 6. A detailed explanation of how the buffer widths were determined 7. All measures SDG&E will implement to preclude birds from utilizing project-related structures (i.e., construction equipment, facilities, or materials) for nesting. <p>To determine presence of nesting birds that the project activities may affect, surveys should be conducted beyond the project area—300 feet for passerine birds and 500 feet for raptors. The survey protocols should include a detailed description of methodologies utilized by CDFG-approved avian biologists to search for nests and describe avian behaviors that indicate active nests. The protocols should include but are not limited to the size of project corridor being surveyed, method of search, and behavior that indicates active nests. Each nest identified in the project area should be included in the NML. The NMLs should be updated daily and submitted to the CDFG weekly. Since the purpose of the NMLs is to allow the CDFG to track compliance, the NMLs should include information necessary to allow comparison between nests protected by standard buffer widths recommended for the project (300 feet for passerine birds, 500 feet for raptors) and nests whose standard buffer width was reduced by encroachment of project-related activities. The NMLs should provide a summary of each nest identified, including the species, status of the nest, buffer information, and fledge or failure data. The NMLs will allow for tracking the success and failure of the buffers and will provide data on the adequacy of the buffers for certain species. SDG&E will rely on its avian biologists to determine the appropriate standard buffer widths for nests within the project corridor/footprint to employ based on the sensitivity levels of specific species or guilds of avian species. The determination of the standard buffer widths should be site- and species-/guild-specific and data-driven and not based on generalized assumptions regarding all nesting birds. The determination of the buffer widths should consider the following factors:</p> <ol style="list-style-type: none"> a. Nesting chronologies b. Geographic location c. Existing ambient conditions (human activity within line of sight—cars, bikes, pedestrians, dogs, noise) d. Type and extent of disturbance (e.g., noise levels and quality— punctuated, continual, ground vibrations—blasting-related vibrations proximate to tern colonies are known to make the birds flush the nests) e. Visibility of disturbance f. Duration and timing of disturbance g. Influence of other environmental factors h. Species' site-specific level of habituation to the disturbance. <p>Application of the standard buffer widths should avoid the potential for project-related nest abandonment and failure of fledging, and minimize any disturbance to the nesting behavior. If project activities cause or contribute to a bird being flushed from a nest, the buffer must be widened.</p>
Location	In and around any construction activity in the project area (300 feet for passerine birds and 500 feet for raptors).
Monitoring/Reporting Action	Pre-construction nesting bird survey reports to be provided to CPUC/BLM 72 hours prior to construction. NBMMRP shall be prepared if the project must occur during the avian breeding season. Any nests identified shall be included in the NML, which will be updated daily and submitted to CDFG weekly.
Effectiveness Criteria	Site-specific avoidance measures, as necessary, to be identified in the survey report. In the event federal- or state-listed nesting birds are identified, SDG&E shall provide documentation of the recommendations that were provided by the USFWS and/or CDFG. If nests are identified, SDG&E avian biologists will determine appropriate buffer widths that are site- and species-/guild-specific and data-driven.
Responsible Agency	BLM and CPUC
Timing	Prior to construction during the nesting season.
Mitigation Measure	BIO-10a. Design all transmission towers and lines to conform with Avian Power Line

	Interaction Committee standards. The Proposed Project shall implement recommendations by the Avian Power Line Interaction Committee (2006), which will protect raptors and other birds from electrocution. These measures are sufficient to protect even the largest birds that may perch or roost on transmission lines or towers from electrocution.
Location	All areas of the ECO Substation Project site containing transmission towers and lines.
Monitoring/Reporting Action	BLM/CPUC to review final engineering plans.
Effectiveness Criteria	Ensure the final engineering design meets the effectiveness criteria documented by APLIC (2006)
Responsible Agency	BLM and CPUC
Timing	Prior to construction.
Mitigation Measure	BIO-10b. Develop and implement project-specific Avian Protection Plans. Develop and implement an Avian Protection Plan related to wire, transmission tower, and facilities impacts from electrocution and collision of bird species. An Avian Protection Plan shall be developed jointly with the U.S. Fish and Wildlife Service and California Department of Fish and Game and shall provide the framework necessary for implementing a program to reduce bird mortalities and document actions. The Avian Protection Plan shall include the following: corporate policy, training, permit compliance, construction design standards, nest management, avian reporting system, risk assessment methodology, mortality reduction measures, avian enhancement options, quality control, public awareness, and key resources.
Location	All ECO Substation Project areas.
Monitoring/Reporting Action	BLM/CPUC to verify that plan has been submitted and is being implemented.
Effectiveness Criteria	Plan shall identify criteria to determine effectiveness.
Responsible Agency	BLM and CPUC
Timing	Plan that has been prepared jointly with USFWS shall be submitted to BLM/CPUC for review 90 days prior to initiation of project construction. Plan shall be implemented throughout project construction and operation.
Mitigation Measure	BIO-11a. Conduct maintenance activities resulting in vegetation disturbance outside of the bird nesting season or conduct pre-construction nesting bird surveys. Maintenance activities with the potential to result in direct or indirect habitat disturbance, most notably vegetation management, shall be conducted outside of the bird nesting season to the maximum extent practicable. Where avoidance is not possible, the project proponent shall conduct pre-construction nesting bird surveys consistent with the requirements of the NCCP to determine the presence/absence of active nests in or adjacent to construction areas. If active nests are identified, appropriate avoidance measures would be identified and implemented to prevent disturbance to the nesting bird(s). If federal or state listed nesting birds are identified, the project proponent shall contact the U.S. Fish and Wildlife Service and/or California Department of Fish and Game to determine the appropriate course of action.
Location	All operations and maintenance areas associated with the substation site and transmission corridors.
Monitoring/Reporting Action	Pre-construction nesting bird survey reports to be completed 72-hours prior to completing maintenance activities that result in vegetation disturbance consistent with the requirements of the NCCP.
Effectiveness Criteria	Site-specific avoidance measures, as necessary, to be identified in the survey report.
Responsible Agency	BLM and CPUC
Timing	72 hours prior to maintenance activities during the nesting season.

Table D.3-6
Mitigation Monitoring, Compliance, and Reporting–ECO Substation Project –Visual Resources

Mitigation Measure	VIS-1a. Reduce impacts at scenic highway and trail crossings. At highway and trail crossings, structures shall be placed at the maximum feasible distance from the crossing to reduce visual impacts as long as other significant resources are not negatively affected.
Location	Where the transmission line would establish a new transmission corridor and be located within 0.5 mile of a County trail or pathway.
Monitoring/Reporting Action	CPUC to review construction plans before the start of construction and to verify that structures are placed at the maximum feasible distance from the Jewel Valley Trail and the Jewel Valley Road Pathway.
Effectiveness Criteria	Visual impacts to identified trails and pathways are minimized and transmission line structures are placed the maximum feasible distance from these facilities.
Responsible Agency	CPUC
Timing	CPUC to review construction plans before the start of construction and to verify compliance with plans during construction.
Mitigation Measure	VIS-1b. Reduce impacts at scenic view areas. In scenic view areas (the Jewel Valley Trail and the Jewel Valley Road Pathway) transmission line structures would be placed to avoid sensitive features and/or allow conductors to clearly span the features, within limits of standard design where feasible.
Location	Transmission line structures and lines visible from the Jewel Valley Trail and the Jewel Valley Road Pathway.
Monitoring/Reporting Action	CPUC to review construction plans before the start of construction and to verify that structures are placed to avoid sensitive features
Effectiveness Criteria	Structures are sited to avoid sensitive features and visual impacts as scenic view areas are reduced.
Responsible Agency	CPUC
Timing	CPUC to review construction plans before the start of construction and to verify compliance with plans during construction.
Mitigation Measure	VIS-3a. Reduce visibility of construction activities and equipment. If visible from nearby roads, residences, public gathering areas, or recreational areas, facilities, or trails, stationary construction sites and staging areas and fly yards shall be visually screened using temporary screening fencing. Fencing will be of an appropriate design and color for each specific location. Where practical, construction staging and storage will be screened with opaque fencing from close-range residential views. Additionally, construction in areas visible from recreation facilities and areas during holidays and periods of heavy recreational use shall be avoided. SDG&E shall submit final construction plans demonstrating compliance with this measure to the CPUC for review and approval at least 60 days before the start of construction.
Location	All stationary construction areas including staging areas and fly yards.
Monitoring/Reporting Action	CPUC and BLM to verify in the field during construction and following construction
Effectiveness Criteria	Stationary project construction sites, construction yards, and staging areas will be screened during construction, and all construction areas will appear in their original or improved condition following construction.
Responsible Agency	CPUC and BLM
Timing	CPUC and BLM to confirm implementation during and following construction.
Mitigation Measure	VIS-3b. Reduce construction night-lighting impacts. SDG&E shall design and install all lighting at construction and storage yards and at staging areas and fly yards such that illumination of the project facilities, vicinity, and nighttime sky is minimized. The Construction

	<p>Lighting Mitigation Plan shall be reviewed for consistency with the County of San Diego Light Pollution Code (Section 59.100 et. al) and Sections 6322 and 6322 of the Zoning Ordinance to ensure outdoor light fixtures emitting light into the night sky do not result in a detrimental effect on astronomical research and to ensure reflected glare and light trespass is minimized. SDG&E shall submit a Construction Lighting Mitigation Plan to the CPUC and BLM for review and approval at least 90 days before the start of construction or the ordering of any exterior lighting fixtures or components, whichever comes first. SDG&E shall not order any exterior lighting fixtures or components until the Construction Lighting Mitigation Plan is approved by the CPUC and BLM. The Plan shall include but is not necessarily limited to the following:</p> <ul style="list-style-type: none"> • Lighting shall be designed so that exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated, and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources are shielded to prevent light trespass outside the project boundary; • All lighting shall be of minimum necessary brightness consistent with worker safety; and • High illumination areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied.
Location	All static project construction sites associated with the proposed ECO Substation Project and transmission line corridors.
Monitoring/Reporting Action	CPUC and BLM to review and approve the Construction Lighting Mitigation Plan before construction and to monitor implementation in the field during construction.
Effectiveness Criteria	The visibility of light bulbs and reflectors at construction yards and staging areas is minimized from public viewing areas, and night lighting would not cause reflected glare and illumination beyond the construction site and into the nighttime sky to the extent feasible.
Responsible Agency	CPUC and BLM
Timing	SDG&E shall submit a Construction Lighting Mitigation Plan to the CPUC and BLM for review and approval at least 90 days before the start of construction or the ordering of any exterior lighting fixtures or components, whichever comes first. CPUC and BLM to review and approve plan before the start of construction and confirm implementation of plan during construction.
Mitigation Measure	VIS-3c. Reduce construction impacts to natural features. No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate survey or construction activity limits.
Location	At all construction work areas of the proposed ECO Substation Project transmission line corridors.
Monitoring/Reporting Action	CPUC and BLM monitors to ensure compliance with restrictions regarding paint and discoloring agents.
Effectiveness Criteria	No paint or permanent discoloring agents are detected and reported by CPUC monitors.
Responsible Agency	CPUC and BLM
Timing	CPUC and BLM to monitor for compliance during construction.
Mitigation Measure	VIS-3d. Reduce in-line views of land scars. Construct access or spur roads at appropriate angles from the originating primary travel facilities to minimize extended in-line views of newly graded terrain, when feasible. Contour grading should be used where feasible to better blend graded surfaces with existing terrain. SDG&E shall submit final construction plans demonstrating compliance with this measure to the CPUC and BLM for review and approval at least 60 days prior to the start of construction.
Location	All grading sites for access roads, spur roads, and ancillary facilities associated with the proposed ECO Substation Project and transmission line corridors.
Monitoring/Reporting Action	CPUC and BLM to review construction plans before the start of construction and verify compliance during construction.
Effectiveness Criteria	In-line views of land scars from grading will be minimized.
Responsible Agency	CPUC and BLM.
Timing	CPUC and BLM to review construction plans before the start of construction and verify compliance during construction.

Mitigation Measure	VIS-3e. Reduce visual contrast from unnatural vegetation lines. In those areas where views of land scars are unavoidable, the boundaries of disturbed areas shall be aggressively revegetated to create a less distinct and more natural-appearing line to reduce visual contrast. Furthermore, all graded roads and areas not required for ongoing operation, maintenance, or access shall be returned to preconstruction conditions. In those cases where potential public access is opened by construction routes, SDG&E shall create barriers or fences to prevent public access and shall patrol construction routes to prevent vandalized access and litter cleanup until all areas where vegetation was removed are returned to pre-project state. SDG&E shall submit final construction and restoration plans demonstrating compliance with this measure to the CPUC and BLM for review and approval at least 60 days before the start of construction.
Location	All grading sites for access roads, spur roads, and ancillary facilities associated with the propose ECO Substation Project and transmission line corridors.
Monitoring/Reporting Action	CPUC and BLM to review construction and restoration plans before the start of construction and to verify implementation following construction
Effectiveness Criteria	The occurrence of unnatural vegetation lines will be minimized and the resulting visual contrast will be minimal.
Responsible Agency	CPUC and BLM
Timing	SDG&E shall submit final construction and restoration plans demonstrating compliance with this measure to the CPUC and BLM for review and approval at least 60 days before the start of construction. CPUC and BLM to review construction and restoration plans before the start of construction and to verify implementation following construction.
Mitigation Measure	VIS-3f. Minimize vegetation removal. Only the minimum amount of vegetation necessary for the construction of structures and facilities will be removed. Topsoil located in areas to be restored shall be conserved during excavation and reused as cover on disturbed areas to facilitate re-growth of vegetation. Topsoil located in developed or disturbed areas is excluded from this measure.
Location	All project component sites where surface disturbance is proposed for the Proposed ECO Substation Project and transmission line corridors
Monitoring/Reporting Action	CPUC and BLM to review construction and restoration plans before the start of construction and to verify minimal vegetation removal during construction
Effectiveness Criteria	The occurrence of vegetation removal will be minimized and the resulting visual contrast will be minimal.
Responsible Agency	CPUC and BLM
Timing	CPUC and BLM to review construction and restoration plans before the start of construction and to verify minimal vegetation removal during construction.
Mitigation Measure	VIS-3g. Reduce visual contrast associated with substation and ancillary facilities. SDG&E shall submit to the CPUC a Surface Treatment Plan describing the application of colors and textures to all new facility structure buildings, walls, fences, and components comprising all ancillary facilities including substations. The Surface Treatment Plan must reduce glare and minimize visual intrusion and contrast by blending the facilities with the landscape. The Treatment Plan shall be submitted to the CPUC for approval at least 90 days before (a) ordering the first structures that are to be color treated during manufacture or (b) construction of any of the ancillary facility components, whichever comes first. If the CPUC notifies SDG&E that revisions to the Plan are needed before the Plan can be approved, within 30 days of receiving that notification, SDG&E shall prepare and submit for review and approval a revised Plan. The Surface Treatment Plan shall include: <ul style="list-style-type: none"> • Specification and 11 x 17-inch color simulations at life-size scale of the treatment proposed for use on project structures, including structures treated during manufacture • A list of each major project structure, building, tower and/or pole, and fencing specifying the color(s) and finish proposed for each (colors must be identified by name and by vendor brand or a universal designation) • Two sets of brochures and/or color chips for each proposed color

	<ul style="list-style-type: none"> • A detailed schedule for completion of the treatment • Procedures to ensure proper treatment maintenance for the life of the project. <p>SDG&E shall not specify to the vendors the treatment of any buildings or structures treated during manufacture or perform the final treatment on any buildings or structures treated on site, until SDG&E receives notification of approval of the Surface Treatment Plan by the CPUC. Within 30 days following the start of commercial operation, SDG&E shall notify the CPUC that all buildings and structures are ready for inspection.</p>
Location	Applies to all permanent ancillary facilities (including substations) associated with the proposed ECO Substation Project.
Monitoring/Reporting Action	CPUC to review Surface Treatment Plan before the start of construction and to verify implementation following construction
Effectiveness Criteria	The occurrence of visual contrast from ancillary facilities will be minimized, and facilities will blend with the landscape to the extent feasible.
Responsible Agency	CPUC
Timing	CPUC to review Surface Treatment Plan before the start of construction and to verify implementation following construction.
Mitigation Measure	<p>VIS-3h. Screen substations and ancillary facilities. SDG&E shall provide a Final Screening/Landscape Plan for screening vegetation, walls, and fences that reduces visibility of ancillary facilities and helps the facility blend in with the landscape. Similar to the use of berms in the Conceptual Landscape Plans prepared for the PEA, the use of berms to facilitate project screening may also be incorporated into the Final Plan. SDG&E shall submit the Plan to the CPUC for review and approval at least 90 days before installing the landscape screening. If the CPUC notifies SDG&E that revisions to the Plan are needed before the Plan can be approved, within 30 days of receiving that notification, SDG&E shall prepare and submit for review and approval a revised Plan. The plan shall include but not necessarily be limited to:</p> <ul style="list-style-type: none"> • An 11 x 17-inch color simulation of the proposed landscaping at 5 years • A plan view to scale depicting the project and the location of screening elements • A detailed list of any plants to be used, their size and age at planting, the expected time to maturity, and the expected height at 5 years and at maturity • SDG&E shall complete installation of the screening/landscape plan before the start of project operation • SDG&E shall notify the CPUC within 7 days after completing installation of the screening/landscape plan that the screening components are ready for inspection.
Location	Applies to all permanent ancillary facilities (including substations) associated with the proposed ECO Substation Project
Monitoring/Reporting Action	CPUC to review Final Screening/Landscape Plan before the start of construction and to verify implementation following construction
Effectiveness Criteria	The occurrence of visual contrast from ancillary facilities will be minimized, and facilities will be adequately screened and will blend with the landscape to the extent feasible.
Responsible Agency	CPUC
Timing	CPUC to review Final Screening/Landscape Plan before the start of construction and verify implementation following construction.
Mitigation Measure	VIS-3i. Reduce potential visual contrast of transmission structures. SDG&E will use dulled-metal-finish transmission structures and non-specular conductors.
Location	At all substation facilities and along the transmission line alignment (ECO Substation Project and transmission line corridors)
Monitoring/Reporting Action	CPUC and BLM to review construction plans to ensure that dulled-metal-finish transmission structures and non-specular conductors are identified before the start of construction and to verify implementation of components during construction.
Effectiveness Criteria	The occurrence of visual contrast from transmission structures will be minimized, and

	structures will blend with the landscape to the extent feasible.
Responsible Agency	CPUC and BLM
Timing	CPUC and BLM to review construction plans to ensure that dulled-metal-finish transmission structures and non-specular conductors are identified before the start of construction and to verify implementation of components during construction.
Mitigation Measure	VIS-3j. Reduce potential transmission conductor visibility and visual contrast. The following design measures shall be applied to all new structure locations, conductors, and re-conducted spans to reduce the degree of visual contrast caused by the new facilities: <ul style="list-style-type: none"> • All new conductors and re-conducted spans to be non-specular to reduce conductor visibility and visual contrast. • Where revisions would not conflict with existing design considerations to avoid sensitive resources (including hydrological, cultural, and biological resources), no new access roads shall be constructed such that they directly approach existing or proposed towers in a straight line from sensitive viewing locations immediately downhill of the structures.
Location	All transmission line structures
Monitoring/Reporting Action	CPUC and BLM to review construction plans to ensure that conductors are non-specular and that access roads do not directly approach existing or proposed towers in a straight line from sensitive viewing locations
Effectiveness Criteria	The visibility of conductors will be minimized, and the visual impacts of access roads on sensitive viewing locations will be minimized.
Responsible Agency	CPUC and BLM
Timing	CPUC and BLM to review construction plans before the start of construction and verify implementation of design measures following construction
Mitigation Measure	VIS-3k. Reduce potential visual contrast from transmission structure spacing. Where the line parallels existing transmission lines, the spacing of structures shall match the existing transmission structures, where feasible, to minimize visual effects.
Location	All transmission line structures associated with the proposed ECO Substation Project and project alternatives
Monitoring/Reporting Action	CPUC and BLM to review construction plans to ensure that spacing of structures matches existing transmission structures
Effectiveness Criteria	The occurrence of visual contrasts from transmission structures will be minimized.
Responsible Agency	CPUC and BLM
Timing	CPUC and BLM to review construction plans before the start of construction and to verify implementation of design measures following construction
Mitigation Measure	VIS-3l. Reduce potential view blockage and visual contrasts of structures. Transmission line structures will not be installed directly in front of residences or in direct line-of-sight from a residence, where feasible. SDG&E will consult with affected property owners on structure siting to reduce land use and visual impacts.
Location	All transmission line structures
Monitoring/Reporting Action	CPUC and BLM to review construction plans to ensure that structures are not planned directly in front of residents or in direct line of sight from residences.
Effectiveness Criteria	The occurrence of view blockage from transmission structures will be minimized.
Responsible Agency	CPUC and BLM
Timing	SDG&E to consult with affected property owners on structure siting to reduce land use and visual impacts before obtaining Permit to Construct
Mitigation Measure	MM VIS-3m: Reduce visual impacts resulting from native tree removal. In the event that ornamental or native trees within the project area will be removed due to project design and grading, SDG&E shall prepare a Tree Replacement Plan to be submitted with the Screening/Landscape Plan. The Tree Replacement Plan shall include but is not limited to the following: <ul style="list-style-type: none"> • Tree Removal Locations: Indicate the size, type, and location of each tree (additional

	<p>items, such as a tree survey by a professional engineer or licensed land survey, may be required.)</p> <ul style="list-style-type: none"> • Assessment of the health and structural conditions, soils, tree size (trunk diameter, basal diameter, height, canopy spread), pest and disease presence, and accessibility of native oak trees to be removed due to project design and grading in order to determine whether existing trees can be transplanted outside the project footprint post-construction. If the assessment determines native oak trees can be transplanted, the oaks would be augmented with additional oak plantings in case the larger trees decline and are lost as a result of the relocation process. If native oak trees cannot be transplanted, the Tree Replacement Plan shall indicate the size, type, and location of each proposed replacement tree (additional items, such as a tree survey by a professional engineer or licensed land survey, may be required). • Photos of the site and/or trees to be removed. • Oak replacement plan focusing on oak tree planting with smaller container trees at higher numbers, recommended at least 5:1 with 15-gallon size trees. <p>The Tree Replacement Plan must minimize mature tree loss to the degree feasible. The Tree Replacement Plan shall be submitted to the CPUC for approval at least 90 days prior to planned tree removal. If the CPUC notifies SDG&E that revisions to the Plan are needed before the Plan can be approved, within 30 days of receiving that notification, the SDG&E shall prepare and submit the revised Tree Replacement Plan for review and approval.</p>
Location	At the Boulevard Substation Rebuild site.
Monitoring/Reporting Action	CPUC to review Tree Replacement Plan in conjunction with the Screening/Landscape Plan before start of construction and to verify implementation following construction
Effectiveness Criteria	Visual impacts resulting from native tree removal would be reduced.
Responsible Agency	CPUC
Timing	The Tree Replacement Plan shall be submitted to the CPUC by SDG&E for approval at least 90 days prior to planned tree removal. CPUC to verify implementation of plan following construction.
Mitigation Measure	<p>VIS-4a. Reduce long-term night-lighting impacts from substations and ancillary facilities. SDG&E shall design and install all permanent lighting such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project facilities, vicinity, and nighttime sky is minimized. The Lighting Mitigation Plan shall be reviewed for consistency with the County of San Diego Light Pollution Code (Section 59.100 et. al) and Sections 6322 and 6322 of the Zoning Ordinance to ensure outdoor light fixtures emitting light into the night sky do not result in a detrimental effect on astronomical research and to ensure reflected glare and light trespass is minimized. SDG&E shall submit a Lighting Mitigation Plan to the CPUC for review and approval at least 90 days before ordering any permanent exterior lighting fixtures or components. SDG&E shall not order any exterior lighting fixtures or components until the Lighting Mitigation Plan is approved by the CPUC. The Plan shall include but is not necessarily limited to the following:</p> <ul style="list-style-type: none"> • Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated, and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources are shielded to prevent light trespass outside the project boundary. • All lighting shall be of minimum necessary brightness consistent with worker safety. • High illumination areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied.
Location	At substations and ancillary facilities included in the proposed ECO Substation Project
Monitoring/Reporting Action	CPUC to review Lighting Mitigation Plan before the start of construction and verify implementation following construction

Effectiveness Criteria	Light bulbs and reflectors at substations would not be visible from public viewing areas, and night lighting would not cause reflected glare and illumination beyond the facility boundary and into the nighttime sky.
Responsible Agency	CPUC
Timing	CPUC to review Lighting Mitigation Plan before the start of construction and to verify implementation following construction.
APM	ECO-AES-1. To reduce potential visual contrast and integrate the ECO Substation's appearance with the desert landscape setting, when project construction has been completed, all disturbed terrain at the ECO Substation site will be restored through recontouring and revegetation in accordance with the Landscaping Plan included as Appendix 5: Landscape Concept Plans.
Location	At the ECO Substation
Monitoring/Reporting Action	CPUC to review and approve East County Substation Landscape Concept Plan
Effectiveness Criteria	All disturbed terrain at the ECO Substation site will be restored through recontouring and revegetation.
Responsible Agency	CPUC
Timing	CPUC to review East County Substation Landscape Concept Plan before issuance of notice to proceed; CPUC to ensure recontouring and revegetation after construction
APM	ECO-AES-2. When project construction has been completed, all disturbed terrain at the Boulevard Substation site will be restored through recontouring, revegetation, and landscaping in accordance with the Boulevard Substation Landscape Concept Plan included as Appendix 5: Landscape Concept Plans. To provide screening and thus reduce potential project visibility, the Boulevard Substation Landscape Concept Plan includes larger shrubs and trees that will partially screen views of the substation from Old Highway 80 and from adjacent residential properties.
Location	At the rebuilt Boulevard Substation
Monitoring/Reporting Action	CPUC to review Boulevard Landscape Plan
Effectiveness Criteria	All disturbed terrain at the Boulevard Substation Rebuild site will be restored through recontouring and revegetation.
Responsible Agency	CPUC
Timing	CPUC to review the Boulevard Substation Landscape Concept Plan before issuance of notice to proceed; CPUC to ensure recontouring and revegetation after construction
APM	ECO-AES-3. To reduce the project's potential visibility from Old Highway 80, the underground portion of the new 138 kV transmission line will be extended an additional distance of approximately 600 feet to the south, and the steel cable riser pole will be relocated to replace structure SP-2.
Location	At the underground portion of the 138 kV transmission line before entering the Boulevard Substation Rebuild site (proposed ECO Substation Project).
Monitoring/Reporting Action	CPUC to review construction plans to verify that transmission line has been extended and that the steel cable riser pole is relocated
Effectiveness Criteria	Visibility of transmission cable riser pole from Old Highway 80 is reduced, and the new 138 kV transmission line is extended.
Responsible Agency	CPUC
Timing	CPUC to review construction plans before the start of construction and to verify implementation during construction

**Table D.4-16
Mitigation Monitoring, Compliance, and Reporting – Proposed ECO Substation Project –
Land Use**

Mitigation Measure	LU-1a. Prepare Construction Notification Plan. Forty-five days prior to construction, SDG&E shall prepare and submit a Construction Notification Plan to the BLM and CPUC for approval. The Plan
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	<p>shall identify the procedures that will be used to inform property owners of the location and duration of construction, identify approvals that are needed prior to posting or publication of construction notices, and include text of proposed public notices and advertisements. The Plan shall address at a minimum two of the following components:</p> <ul style="list-style-type: none"> • Public notice mailer. A public notice mailer shall be prepared and mailed no less than 15 days prior to construction. The notice shall identify construction activities that would restrict, block, remove parking, or require a detour to access existing residential properties. The notice shall state the type of construction activities that will be conducted and the location and duration of construction, including all helicopter activities. SDG&E shall mail the notice to all residents or property owners within 1,000 feet of project components. If construction delays of more than 7 days occur, an additional notice shall be prepared and distributed. • Newspaper advertisements. Fifteen days prior to construction within a route segment, notices shall be placed in local newspapers and bulletins, including Spanish language newspapers and bulletins. The notice shall state when and where construction will occur and provide information about the public liaison person and hotline. If construction is delayed for more than 7 days, an additional round of newspaper notices shall be placed to discuss the status and schedule of construction. • Public venue notices. Thirty days prior to construction, notice of construction shall be posted at public venues such as libraries, community notification boards, post offices, rest stops, community centers, and other public venues to inform affected residents of the purpose and schedule of construction activities. • Public liaison person and toll-free information hotline. SDG&E shall identify and provide a public liaison person before and during construction to respond to concerns of neighboring property owners about noise, dust, and other construction disturbances. Procedures for reaching the public liaison officer via telephone or in person shall be included in notices distributed to the public. SDG&E shall also establish a toll-free telephone number for receiving questions or complaints during construction and shall develop procedures for responding to callers. Procedures for handling and responding to calls shall be addressed in the Construction Notification Plan.
Location	ECO Substation Project and any project component where residences are located within 1,000 feet of project components
Monitoring/Reporting Action	SDG&E shall conduct public notification as defined. CPUC/BLM monitor verifies that SDG&E submits Construction Notification Plan, which identifies complete notification and public inquiry process.
Effectiveness Criteria	SDG&E to provide CPUC/BLM with construction notices for review and approval at least 60 days prior to construction. Notices will provide advance notice of construction activities to limit noise, dust, and disruption impacts.
Responsible Agency	CPUC/BLM
Timing	Prior to and during construction
Mitigation Measure	LU-1b. Notify property owners and provide access. To facilitate access to properties obstructed by construction activities, SDG&E shall notify property owners and tenants at least 24 hours in advance of construction activities and shall provide alternative access if required.
Location	Along the entire ECO Substation Project and project components where residences are located within 1,000 feet of project components
Monitoring/Reporting Action	SDG&E shall conduct public notification as defined.
Effectiveness Criteria	CPUC/BLM to inspect periodically to verify compliance and continued access to properties are maintained.
Responsible Agency	CPUC/BLM
Timing	During construction where residences are within 1,000 feet of the transmission line
Mitigation Measure	LU-2. Revise project elements to minimize land use conflicts. At least 90 days prior to completing final transmission line design for the approved route, SDG&E shall notify landowners of parcels through which the alignment would pass regarding the specific location of the ROW, individual towers, staging areas, access roads, or other facilities associated with the project that would occur on the subject property. The notified parties shall be provided at least 30 days in which

	<p>to identify conflicts with any planned development on the subject property and to work with SDG&E to identify potential reroutes of the alignment that would be mutually acceptable to SDG&E and the landowner. Property owners whose land may be divided into potentially uneconomic parcels shall be afforded this same opportunity, even if development plans have not been established. SDG&E shall endeavor to accommodate these reroutes only to the extent that they are reasonable and feasible, do not create a substantial increase in cost, and do not create adverse impacts to resources or to other properties that would be greater in magnitude than impacts that would occur from construction and operation of the alignment as originally planned.</p> <p>SDG&E shall provide a written report to the CPUC/BLM providing evidence of the notice to landowners and copies of any responses to the notice within 30 days of the notice closing date for responses. SDG&E shall also identify in the documentation submitted to the CPUC and BLM whether reroutes recommended by the landowner or SDG&E can be accommodated. Where they cannot be accommodated, the reasons shall be provided. SDG&E shall provide information sufficient for the CPUC and BLM to determine that the reroute creates no more adverse impact than the originally planned alignment location. SDG&E shall include environmental information consistent with that required for a variance. Where a reroute is proposed, the CPUC or BLM will review and agree to accept or reject individual reroutes. The CPUC or BLM may also recommend compromise reroutes for any of the parcels for which responses were provided in a timely fashion.</p>
Location	ECO Substation Project and transmission line corridors
Monitoring/Reporting Action	Confirm receipt of notice and results prior to final design
Effectiveness Criteria	Provision of a report indicating contents of notice, distribution of notice, and any responses and resolutions
Responsible Agency	CPUC/BLM
Timing	Providing acceptable report prior to final design that verifies compliance with measure

Table D.5-5

Mitigation Monitoring, Compliance, and Reporting – Proposed ECO Substation Project – Wilderness and Recreation

Mitigation Measure	WR-1 Provide notice for access restrictions or anticipated closures to wilderness and recreation areas. SDG&E shall coordinate with the County of San Diego to ensure that proper signage is posted in advance for any access restriction and/or anticipated closures of wilderness and recreation areas (including trails and pathways) so that recreational users may plan accordingly. Signage shall be posted 30 days prior to construction at public venues such as rest stops, resource management offices, and along access routes to known recreational destinations that would be restricted, blocked, or detoured. Notices shall provide information on alternative recreation areas that may be used during the closure of these facilities.
Location	Along the transmission line corridor, between approximate MP 7.6 and MP 12
Monitoring/Reporting Action	CPUC will verify that the County of San Diego has reviewed SDG&E's Construction Notification Plan and will ensure its implementation.
Effectiveness Criteria	Approval and implementation of the Plan Recreationists potentially impacted are informed of construction activities; procedures are established and documented for taking and responding to construction comments and concerns.
Responsible Agency	CPUC
Timing	45 days prior to construction for Construction Notification Plan

Table D.7-15

Mitigation Monitoring, Compliance, and Reporting – ECO Substation Project – Cultural and Paleontological Resources

Mitigation Measure	CUL-1A, Develop and Implement a Historic Properties Treatment Plan-Cultural
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	<p>Resources Management Plan: A Historic Properties Treatment Plan–Cultural Resources Management Plan (HPTP-CRMP) shall be prepared to avoid or mitigate impacts for significant cultural resources pursuant to Section 106 Guidelines. An MOA shall be developed among all federal, state, and local agencies to implement the HPTP-CRMP. As part of the HPTP-CRMP, recorded cultural resources that can be avoided shall be listed and demarcated during construction as Environmentally Sensitive Areas (ESAs). All recommended NRHP- and/or CRHR-eligible resources that would not be affected by direct impacts, but are within 100 feet of direct impact areas, shall be designated as ESAs. Protective fencing or other markers shall be erected and maintained on SDG&E-owned property, easements, or ROW to protect ESAs from inadvertent trespass for the duration of construction in the vicinity (the ESA fencing should demarcate the limits of the construction areas and where people have to stay within the easement, ROW, or SDG&E-owned property). An archaeologist shall monitor during ground-disturbing activities at all cultural resource ESAs. The HPTP-CRMP shall also define any additional areas that are considered to be of high sensitivity for discovery of buried NRHP-eligible historic properties and CRHR-eligible historic resources, including burials, cremations, or sacred features. These areas of high sensitivity shall also be monitored by qualified archaeologists during construction. If recommended NRHP-eligible historic properties and CRHR-eligible historic resources are not avoidable, the HPTP-CRMP shall provide a process for evaluating NRHP and CRHR eligibility, consulting with Native Americans about site treatment, working with engineers to avoid resources; suggest various options for reducing adverse effects; and outline a data recovery mitigation plan that would include research design, field sampling, laboratory analysis, reporting, curation, and dissemination of results. Other treatment measures to resolve adverse effects could include but are not limited to historical documentation, photography, collection and publishing of oral histories, field work to gather information for research purposes or some form of public awareness or interpretation. A description of alternative treatments to resolve adverse effects other than data recovery excavations could also include:</p> <ul style="list-style-type: none"> • Relocation of construction component to portions of historic properties that do not contribute to the qualities that make the resource eligible for the NRHP and CRHR; • Deeding cemetery of other sensitive areas outside of the substation property and related facilities into open space in perpetuity and providing necessary long-term protection measures; • Public interpretation including the preparation of a public version of the cultural resources studies and/or education materials for local schools; • Providing Native American tribes future access to traditional and cultural areas on the Project site, but outside of the substation property and related facilities, after completion of Project construction; and • SDG&E financial support of existing cultural centers for the preparation of interpretive displays. <p>The HPTP-CRMP shall include provisions for reporting and curation of artifacts and data at a facility that is approved by the agency. The applicant shall attempt to gain permission for artifacts from privately held land to be curated with the other project collections. As part of the HPTP-CRMP, processing of all collected cultural remains shall be described. All artifacts shall be analyzed to identify function and chronology as they relate to the history of the area. Faunal material shall be identified as to species.</p> <p>A Native American monitor may be required at culturally sensitive locations specified by the lead agency following government-to-government consultation with Native American tribes. The monitoring plan in the CRMP shall indicate the locations where Native American monitors shall be required.</p> <p>CUL-1B, Avoid and Protect Significant Resources. SDG&E shall design and implement a long-term management plan to protect NRHP-eligible, CRHR-eligible sites or sites treated as eligible for project management purposes from direct impacts of project operation and maintenance and from indirect impacts (such as erosion</p>
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	<p>and access) that could result from the presence of the project. The plan shall be developed in consultation with the BLM and other consulting parties to design measures that shall be effective against project maintenance impacts, such as vegetation clearing and road and tower maintenance, and project-related vehicular impacts. The plan shall also include a context for understanding the cultural resources within the ROW and describe how protective measures will be undertaken for the cultural resources within the ROW or main project area that may experience operational and access impacts as a result of the project. Measures considered shall include demarcation of Environmentally Sensitive Areas (ESA's) during any subsequent project construction maintenance activities for all historic properties within 50 feet of direct impact areas, permanent restrictive fencing or gates, permanent access road closures, signage, stabilization of potential erosive areas, site capping, site patrols, and interpretive/educational programs, or other measures that will be effective for protecting the resources. The plan shall be property specific and shall include provisions for monitoring and reporting its effectiveness and for addressing inadequacies or failures that result in damage to resources. Monitoring of sites selected during consultation with BLM and CPUC shall be conducted annually by a professional archaeologist for a minimum period of 5 years. Monitoring shall include inspection of all site loci and defined surface features, documented by photographs from fixed photo monitoring stations and written observations. A monitoring report shall be submitted to the BLM and CPUC within 1 month following the annual resource monitoring. The report shall indicate any properties that have been affected by erosion, unauthorized excavation or collecting or vehicle or maintenance impacts. For properties that have been impacted, SDG&E shall provide recommendations for mitigating impacts and for improving protective measures. After 5 years of resource monitoring, the BLM and CPUC shall evaluate the effectiveness of the protective measures and the monitoring program. Based on that evaluation, the BLM and CPUC may require that SDG&E revise or refine the protective measures, or alter the monitoring protocol or schedule. If the BLM does not authorize alteration of the monitoring protocol or schedule, those shall remain in effect for the duration of the project operation.</p> <p>If annual monitoring program identifies adverse effects to properties eligible for listing on the NRHP and CRHR from operation or long-term presence of the project, or if, at any time, SDG&E, the BLM or CPUC become aware of such adverse effects SDG&E shall notify the BLM and CPUC immediately and shall implement additional protective measures, as directed by the BLM and CPUC. At the discretion of the BLM and/or CPUC such measures may include, but not be limited to, refinement of monitoring protocols, data-recovery investigations, or payment of compensatory damages in the form of non-destructive cultural resource studies or protection.</p> <p>CUL-1C, Training for Contractor:</p> <p>All construction personnel shall be trained regarding the recognition of possible buried cultural remains and protection of all cultural resources, including prehistoric and historic resources during construction, prior to the initiation of construction or ground-disturbing activities. SDG&E shall complete training for all construction personnel and retain documentation showing when training of personnel was completed. Training shall inform all construction personnel of the procedures to be followed upon the discovery of archaeological materials, including Native American burials. Training shall inform all construction personnel that shall be avoided, and that travel and construction activity shall be confined to designated roads and areas. All personnel shall be instructed that unauthorized collection or disturbance of artifacts or other cultural materials on or off the ROW by SDG&E, its representatives, or employees shall not be allowed. Violators shall be subject to prosecution under the appropriate State and federal laws, and violations shall be grounds for removal from the project. Unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop work order. The following issues shall be addressed in training or in preparation for construction:</p> <ul style="list-style-type: none"> • All construction contracts shall require construction personnel to attend training so they are aware of the potential for inadvertently exposing buried archaeological deposits, their responsibility to avoid and protect all cultural resources, and the penalties for
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	<p>collection, vandalism, or inadvertent destruction of cultural resources.</p> <ul style="list-style-type: none"> • SDG&E shall provide training for supervisory construction personnel describing the potential for exposing cultural resources and procedures and notifications required in the event of discoveries by project personnel or archaeological monitors. Supervisors shall also be briefed on the consequences of intentional or inadvertent damage to cultural resources. Supervisory personnel shall enforce restrictions on collection or disturbance of artifacts or other cultural resources <p>CUL-1D, Construction Monitoring: Prior to issuance of grading permit(s), the SDG&E shall retain a qualified archaeologist, in accordance with the Secretary of the Interior's Standards and Guidelines (Secretary's Standards) (36 CFR 61), and Native American observer to monitor ground-disturbing activities in culturally sensitive areas in an effort to identify any unknown resources. A qualified archaeologist shall attend preconstruction meetings, as needed, to make comments and/or suggestions concerning the monitoring program and to discuss excavation plans with the excavation contractor. The requirements for archaeological monitoring shall be noted on the construction plans.</p> <p>All construction activities in environmentally sensitive areas, or any other area of the project deemed sensitive for containing cultural resources, shall be monitored by a qualified archaeologist. Since significant portions of the project site contain sedimentary deposits that have the potential to contain buried cultural resources, then full-time cultural resources monitoring shall be implemented during all phases of ground-disturbing work in these areas. If ESA fencing has been established and the possibility of buried cultural deposits is determined to be low after initial ground-disturbance, the on-site professional archaeologist may determine that full-time monitoring is no longer required in that area. A cultural resource monitor shall meet the Secretary of the Interior Standards Qualifications as a professional archaeologist and, as appropriate, shall be on the lead agencies approved consultants list. The archaeological monitor(s) shall also be familiar with the project area and, therefore, be capable of anticipating the types of cultural resources that may be encountered.</p> <p>CUL-1E, Discovery of Unknown Resources: In the event that previously unknown cultural resources are discovered, the archaeologist shall have the authority to divert or temporarily halt ground disturbance to allow evaluation of recommended significant cultural resources. The process for handling inadvertent discoveries shall be documented in the CRMP. It shall detail the methods, consultation procedures, and timelines for assessing register eligibility, formulating a mitigation plan, and implementing treatment should avoidance and protection of the resource not be possible. Mitigation and treatment plans for unanticipated discoveries shall be approved by the BLM and SHPO prior to implementation. The archaeologist in coordination with the BLM shall evaluate the significance of the discovered resources based on eligibility for the NRHP, CRHR, or local registers. Preliminary determinations of NRHP eligibility shall be made by the CPUC and BLM, in consultation with other appropriate agencies and local governments, and the SHPO.</p> <p>CUL-1F, Control Unauthorized Access: SDG&E shall coordinate with the authorized officer of the BLM or local landowner/administrator at least 60 days before construction in order to determine if gates shall be installed on access roads, especially trails that would be dually used as access roads, to prevent unauthorized vehicular access to the ROW. Gate installation shall be required at the discretion of the BLM. On trails proposed for dual use as access roads, gates shall be wide enough to allow horses, bicycles, and pedestrians to pass through. SDG&E shall document its coordination efforts with the BLM of the road/trail and provide this documentation to the CPUC and BLM 30 days prior to construction. Signs prohibiting unauthorized use of the access roads shall be posted on the installed gates.</p> <p>CUL-1G, Funding of Law Enforcement Patrols: To control unauthorized use of project access roads and to provide for the general protection of cultural and natural resources made more accessible as a result of the project facilities, SDG&E shall provide funding to BLM and CPUC for law enforcement patrols for the term of the ROW. The BLM and CPUC will formulate what funding is reasonable to implement the above.</p> <p>CUL-1H, Continue Consultation with Native Americans and Other Traditional Groups. SDG&E shall provide assistance to the BLM and CPUC, as requested by the BLM and</p>
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	<p>CPUC, to continue required government to government consultation with interested Native American tribes and individuals (Executive Memorandum of April 29, 1994, and Section 106 of the National Historic Preservation Act) and other traditional groups to identify and assess or mitigate the impact of the approved project on traditional cultural properties or other resources of Native American concern, such as sacred sites and landscapes, or areas of traditional plant gathering for food, medicine, basket weaving, or ceremonial uses. As directed by the BLM and CPUC, SDG&E shall undertake required treatments, studies, or other actions that result from such consultation. Actions that are required during or after construction shall be defined, detailed, and scheduled in the HPTP-CRMP and implemented by SDG&E and may include the following:</p> <ul style="list-style-type: none"> • Information regarding further developments in the project; • Participation by Native American monitors in any additional surveys, archaeological excavations, and ground-disturbing construction activities; • Return of any prehistoric artifacts requiring repatriation under the NAGPRA that are recovered to the appropriate tribe after they have been analyzed by archaeologists; • The right to inspect sites where human remains are discovered and to determine the treatment and disposition of the remains; and • Copies of all site records, survey reports, or other environmental documents.
Location	Along entire proposed project
Monitoring/Reporting Action	CPUC/BLM will review and ensure implementation.
Effectiveness Criteria	Approval and implementation of the Plan. All historic properties in the project impact area are identified and protected from disturbance. Quarterly updates to agencies.
Responsible Agency	CPUC/BLM
Timing	Minimum 30 days prior to construction for final Plan in effect throughout construction
Mitigation Measure	<p>CUL-2, Human Remains: All location of known Native American human remains shall be avoided through project design and designation as ESAs if within 100 feet of project components. During construction, if human remains are encountered, Native American consultation consistent with NAGPRA shall be undertaken. In addition, if human remains are encountered on non-federal (state, county, or private) lands, California Health and Safety Code §7050.5 states that no further disturbance shall occur until the San Diego County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code §5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the San Diego County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within a reasonable time frame. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code §5097.98. Avoidance and protection of inadvertent discoveries which contain human remains shall be the preferred protection strategy with complete avoidance of impacts to such resources protected from direct project impacts by project redesign. SDG&E shall follow all State and federal laws, statutes, and regulations that govern the treatment of human remains. SDG&E shall comply with and implement all required actions and studies that result from such consultations, as directed by the BLM and CPUC.</p>
Location	Along entire proposed project
Monitoring/Reporting Action	CPUC/BLM will review and ensure implementation.
Effectiveness Criteria	All human remains in the project impact area are identified and protected from disturbance. Quarterly updates to agencies.
Responsible Agency	CPUC/BLM
Timing	For the duration of project
Mitigation Measure	<p>PALEO-1A, Inventory and evaluate paleontological resources in the Final APE: Prior to construction, SDG&E shall conduct and submit to the BLM and CPUC for approval an inventory of significant paleontological resources within the affected area, based on field surveys of areas identified as marginal through high or undetermined paleontological sensitivity potential.</p>

	<p>PALEO-1B, Develop Paleontological Monitoring and Treatment Plan: Following completion and approval of the paleontological resources inventory and prior to construction, SDG&E shall prepare and submit to the CPUC and BLM for approval a Paleontological Monitoring Treatment Plan (Plan). The Plan shall be designed by a Qualified Paleontologist and shall be based on Society of Vertebrate Paleontology (SVP) guidelines and meet all regulatory requirements, including BLM and County of San Diego Paleontological Resource Guidelines. The qualified paleontologist shall have an MA or PhD in paleontology, shall have knowledge of the local paleontology, and shall be familiar with paleontological procedures and techniques. The Plan shall identify construction impact areas of moderate to high sensitivity for encountering significant resources and the depths at which those resources are likely to be encountered. The Plan shall outline a coordination strategy to ensure that a qualified paleontological monitor will conduct full-time monitoring of all ground disturbance in sediments determined to have a moderate to high sensitivity. Sediments of low, marginal, and undetermined sensitivity shall be monitored on a part-time basis (as determined by the Qualified Paleontologist). Sediments with zero sensitivity will not require paleontological monitoring. The Qualified Paleontologist shall have a BA in Geology or Paleontology, and a minimum of 1 year of monitoring experience in local sediments. The Plan shall detail the significance criteria to be used to determine which resources will be avoided or recovered for their data potential. The Plan shall also detail methods of recovery, preparation and analysis of specimens, final curation of specimens at a federally accredited repository, data analysis, and reporting. The Plan shall specify that all paleontological work undertaken by the applicant on public land shall be carried out by qualified paleontologists with the appropriate current permits, including, but not limited to, a Paleontological Resources Use Permit (for work on public lands administered by BLM). Notices to proceed shall be issued by the lead agency and other agencies with jurisdiction, following approval of the Paleontological Monitoring and Treatment Plan.</p> <p>PALEO-1C, Monitor Construction for Paleontology: Based on the paleontological sensitivity assessment and Paleontological Monitoring and Treatment Plan consistent with Mitigation Measure PALEO-01b (Develop Paleontological Monitoring and Treatment Plan), SDG&E shall conduct full-time construction monitoring by the qualified paleontological monitor in areas determined to have moderate (PFYC - Class 3) to high (PFYC - Class 4) paleontological sensitivity within the ECO Substation. Sediments of low, marginal (i.e., PFYC - Class 2), or, undetermined (PFYC Class 3) sensitivity shall be monitored by a qualified paleontological monitor on a part-time basis (as determined by the Qualified Paleontologist). Construction activities shall be diverted when data recovery of significant fossils is warranted, as determined by the Qualified Paleontologist.</p> <p>PALEO-1D, Conduct Paleontological Data Recovery: If avoidance of significant paleontological resources is not feasible or appropriate based on project design, treatment (including recovery, specimen preparation, data analysis, curation, and reporting) shall be carried out by the project, in accordance with the approved Treatment Plan per Mitigation Measure PALEO-01B (Develop Paleontological Monitoring and Treatment Plan).</p> <p>PALEO-1E, Train Construction Personnel: Prior to the initiation of construction or ground-disturbing activities, all construction personnel shall be trained regarding the recognition of possible subsurface paleontological resources and protection of all paleontological resources during construction. The project shall complete training for all construction personnel. Training shall inform all construction personnel of the procedures to be followed upon the discovery of paleontological materials. Training shall inform all construction personnel that Environmentally Sensitive Areas include areas determined to be paleontologically sensitive, as defined on the paleontological sensitivity maps for the project, and must be avoided, and that travel and construction activity must be confined to designated roads and areas. All personnel shall be instructed that unauthorized collection or disturbance of protected fossils on or off the ROW by the project, its representatives, or employees will not be allowed. Violators will be subject to prosecution under the appropriate state and federal laws, and violations will be grounds for removal from the project. Unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop-work order. The following issues shall be addressed in training or in</p>
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	<p>preparation for construction:</p> <ul style="list-style-type: none"> • All construction contracts shall include clauses that require construction personnel to attend training so they are aware of the potential for inadvertently exposing subsurface paleontological resources, their responsibility to avoid and protect all such resources, and the penalties for collection, vandalism, or inadvertent destruction of paleontological resources. • The project shall provide a background briefing for supervisory personnel describing the potential for exposing paleontological resources, the location of any potential Environmentally Sensitive Areas, and procedures and notifications required in the event of discoveries by project personnel or paleontological monitors. Supervisory personnel shall enforce restrictions on collection or disturbance of fossils. • Upon discovery of paleontological resources by paleontologists or construction personnel, work in the immediate area of the find shall be diverted, and the project paleontologist shall be notified. Once the find has been inspected and a preliminary assessment made, the project paleontologist will notify the lead agency and other appropriate land managers and proceed with data recovery in accordance with the approved Treatment Plan consistent with Mitigation Measure PALEO-1B (Develop Paleontological Monitoring and Treatment Plan).
Location	Areas identified in PALEO-1A, PALEO-1B
Monitoring/Reporting Action	CPUC/BLM will review and ensure implementation.
Effectiveness Criteria	Approval and implementation of the Plan Quarterly updates to agencies
Responsible Agency	CPUC/BLM
Timing	Minimum 30 days prior to construction for final Plan Plan in effect throughout construction

**Table D.8-16
Mitigation Monitoring and Compliance Reporting – ECO Substation Project – Noise**

<p>Mitigation Measure</p>	<p>MM NOI-1 Blasting Plan SDG&E will prepare a blasting plan that will reduce impacts associated with construction-related noise and vibrations related to blasting. The blasting plan will be site specific, based on general and exact locations of required blasting and the results of a project-specific geotechnical investigation. The blasting plan will include a description of the planned blasting methods, an inventory of receptors potentially affected by the planned blasting, and calculations to determine the area affected by the planned blasting. Noise calculations in the blasting plan will account for blasting activities and all supplemental construction equipment. The final blasting plan and pre-blast survey shall meet the requirements provided below, as well as those outlined in Mitigation Measure HAZ-4b. The blasting plan will include a schedule to demonstrate, where feasible, construction blasting to occur infrequently enough that it will not exceed the County's impulsive noise standard because blasting would not occur for more than 25% (15 minutes) during a 1-hour period due to the short time duration of a blast. Where this is not possible, other construction blasting would be coordinated with impacted building occupants to occur in their absence, or at other acceptable times, to avoid nuisance or annoyance complaints. If necessary, the applicant will temporarily relocate impacted residents on an as-needed basis for the duration of the blasting activities. The applicant will be responsible for temporary relocation expenses (i.e.; expenses for temporary housing) incurred by impacted residents if relocation is necessary during blasting activities. To ensure that potentially impacted residents are informed, the applicant will provide notice by mail to all property owners within 300 feet of the project at least 1 week prior to the start of construction activities. Blasting would be completed between 7 a.m. and 7 p.m. to be compliant with County of San Diego noise ordinances. A rock anchoring or min-pile system may be used to reduce the risk of damage to structures during blasting activities. Fair compensation for lost use will be provided to the property owner. Physical damage to potentially vulnerable structures will be addressed by avoiding construction blasting near the structures wherever possible, and, if necessary, non-blasting construction methods will be evaluated. If adversely affected, structures shall be restored to an equivalent condition, and fair compensation for lost use will be provided to the owner. If necessary, the use of portable noise barriers to reduce excessive noise impacts shall be used between the source and affected occupied properties. Noise barriers that break the line of sight would provide 5 dB attenuation. Increasing the height of the barrier would increase the attenuation of the barrier. A 5 dBA to 10 dBA attenuation is considered reasonably feasible. Supplemental construction equipment, such as drill rigs, may be used to support blasting. At a distance of 80 feet, drill rig noise emissions are approximately 75 dBA_{Leq}. Drill rigs, without mitigation, have the potential to cause temporary noise impacts if used less than 80 feet from the property line of an occupied residence. The blasting plan will include measures to reduce noise impacts resulting from the use of drill rigs at less than 80 feet from a property line. Such measures may include temporary noise barriers or limited hours of operation to reduce the impact to within the County standard.</p>
<p>Location</p>	<p>138 kV Transmission Line</p>
<p>Monitoring/Reporting Action</p>	<p>Plan prepared prior to construction. California Public Utilities Commission (CPUC) and Bureau of Land Management (BLM) will ensure that these measures are carried out during project construction.</p>
<p>Effectiveness Criteria</p>	<p>Achieve minimum 5 dBA to 10 dBA noise reduction</p>
<p>Responsible Agency</p>	<p>CPUC/BLM</p>
<p>Timing</p>	<p>Plan prepared prior to construction and in effect throughout construction</p>
<p>Mitigation Measure</p>	<p>MM NOI-2 Conductor configuration selection to address noise impacts As part of the project's design selection process, the proper conductor configuration shall be</p>

	selected so that the corona noise does not exceed the County's noise ordinance limits along the transmission line corridor measured during worst-case weather conditions at or beyond 6 feet from the boundary of the easement upon which the transmission line is located.
Location	SWPL Loop-In
Monitoring/Reporting Action	CPUC will ensure that these measures are carried out prior to project construction.
Effectiveness Criteria	Achieve minimum 5 dBA to 10 dBA noise reduction
Responsible Agency	CPUC
Timing	Prior to construction

**Table D.9-8
Mitigation Monitoring Compliance and Reporting – ECO Substation Project –
Transportation and Traffic**

Mitigation Measure	<p>TRA-1. Prepare and implement a Traffic Control Plan. At minimum, the plan will include the following:</p> <ul style="list-style-type: none"> • SDG&E shall encourage carpooling to the construction site to reduce personal vehicle traffic in the project area to the greatest extent possible. • SDG&E will consider the specific object sizes, weights, origin, destination, and unique handling requirements, and evaluate alternative transportation approaches. • Measures such as informational signs and flaggers shall be implemented when equipment may result in blocked roadways, and traffic cones or similar shall be implemented to identify any necessary changes in temporary lane configuration. • Flaggers and directional guidance for bicyclists along Old Highway 80 shall be used. • All Caltrans' standards for utility encroachments shall be met. • The plan shall be prepared in accordance with Caltrans' Manual on Uniform Traffic Control Devices and the Work Area Traffic Control Handbook (WATCH) Manual. • Clearances or overhead crossings shall conform to regulations of the CPUC and BLM, and the number of crossings shall be minimized. • New installations under an existing roadbed shall be made by the boring-and-jacking method. No trenching under the traveled way will occur. • For freeways and expressways, the placement of longitudinal encroachments is prohibited within controlled-access rights-of-way (ROWs). • Utilities shall not be located in median areas. • Transverse crossings shall be normal (90°) to the highway alignment where practical. If impractical, skews of up to 30° from normal may be allowed. • Supports for overhead lines crossing freeways shall be located outside the controlled-access ROW and not on cut-or-fill slopes, and shall not impair sight distances. All installations shall be placed as close to the ROW line as possible. Aboveground utilities shall be outside of the clear recovery zone (20 feet from edge-of-travel way for conventional highways and 30 feet for freeways and expressways). Allowance shall be made for future widening of the highways. • New installations shall not impair sight distances. • SDG&E shall coordinate in advance with the applicants for the other two connected actions. This effort shall include coordinating the timing of construction of the various projects to reduce potential conflicts. • SDG&E shall coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles. The County will then notify respective police, fire, ambulance, and paramedic services. SDG&E shall notify counties and cities of the proposed locations, nature, timing, and duration of any construction activities, and advise of any access restrictions that could impact their effectiveness. <p>SDG&E shall provide a draft copy of the Traffic Control Plan to the agencies listed for comment a minimum of 90 days prior to the start of any construction activities. The comments will be provided back</p>
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	to SDG&E, and plan revisions will address each comment to the satisfaction of the commenting agency. The final plan will be submitted to the CPUC and BLM with input from commenting agencies and provided to SDG&E for implementation during all construction activities.
Location	At construction zones along proposed ECO Substation Project and utility corridors
Monitoring/Reporting Action	CPUC, BLM, San Diego County, and Caltrans (if required) will review Traffic Control Plan. The CPUC and BLM will ensure its implementation. For coordination with emergency service providers, document coordination with providers, including provision of construction schedule shall be provided at the time of submittal of the Traffic Control Plan.
Effectiveness Criteria	Approval and implementation of the plan. For coordination with emergency service providers: evidence of coordination.
Responsible Agency	CPUC/BLM
Timing	Plan in effect throughout construction.
Mitigation Measure	TRA-2. Repair roadways damaged by construction activities. If damage to roads occurs, SDG&E shall coordinate repairs with the affected public agencies to ensure that any impacts to area roads are adequately repaired at SDG&E's cost. Roads disturbed by construction activities or construction vehicles shall be properly restored to ensure long-term protection of road surfaces. Care shall be taken to prevent damage to roadside drainage structures. Roadside drainage structures and road drainage features (e.g., rolling dips) shall be protected by regrading and reconstructing roads to drain properly. Said measures shall be incorporated into an access agreement/easement with the applicable governing agency prior to construction.
Location	All roads used to access construction sites
Monitoring/Reporting Action	Review documentation to ensure that SDG&E obtained permits for construction within each road ROW prior to construction. Verify that each affected roadway has been satisfactorily restored and/or reconstructed within 30 days of the end of the construction.
Effectiveness Criteria	Restoration/maintenance of roads to preconstruction conditions as determined by the affected public agency
Responsible Agency	CPUC/BLM
Timing	After construction is completed on each affected roadway
Mitigation Measure	TRA-3. Consult with and inform the FAA, DOD, and U.S. Customs and Border Protection. SDG&E shall consult with the FAA, DOD, and U.S. Customs and Border Protection (San Diego Sector) to avoid potential safety issues associated with proximity to airports, military bases or training areas, and land strips and to determine where Border Protection aircraft operate in the County. Prior to construction, SDG&E shall provide written notification to the FAA, the U.S. Air Force Regional Environmental Coordinator (or appropriate DOD representative), U.S. Customs and Border Protection (San Diego Sector), and to the CPUC and BLM, stating when and where the new transmission lines and towers will be erected, and shall install markers as requested by the U.S. Customs and Border Protection or FAA. SDG&E shall also provide all agencies listed above with aerial photos or topographic maps clearly showing the new lines and towers.
Location	Along 138 kV transmission line alignment
Monitoring/Reporting Action	Evidence of notification and submittal of aerial photos and/or topographic maps to FAA, DOD, U.S. Customs and Border Protection, CPUC and BLM
Effectiveness Criteria	Evidence of notification and sharing of information about the location of the new lines and towers.
Responsible Agency	CPUC and BLM
Timing	Evidence of notification shall be provided to the CPUC and BLM after final engineering and prior to construction

Table D.10-13

Mitigation Monitoring, Compliance, and Reporting – ECO Substation Project – Public Health and Safety

Mitigation Measure	HAZ-1a. Hazardous Materials Management Plan. Prior to approval of final construction plans, SDG&E shall prepare an HMMP for the construction phase of the project, which shall be reviewed and approved by the appropriate agency, and shall include the
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	<p>following components:</p> <ul style="list-style-type: none"> • The plan shall identify all hazardous materials that will be present on any portion of the construction site, including, but not limited to, fuels, solvents, and petroleum products. The plan shall address storage, use, transportation, and disposal of each hazardous material anticipated to be used at the site. The plan shall establish inspection procedures, storage requirements, storage quantity limits, inventory control, nonhazardous product substitutes, and disposition of excess materials. • The plan shall identify secondary containment and spill prevention countermeasures, as well as a contingency plan to identify potential spill hazards, how to prevent their occurrence, and responses for different quantities of spills that may occur. Secondary containment and countermeasures shall be in place throughout construction so that if any leaks or spills occur, responses will be made immediately. • The plan shall identify materials (and their locations) that will be on site and readily accessible to clean up small spills (i.e., spill kit, absorbent pads, and shovels). Such emergency spill supplies and equipment shall be clearly marked and located adjacent to all areas of work and in construction staging areas. The plan shall identify the spill-response materials that must be maintained in vehicles and substation sites during construction and procedures for notification to the appropriate authorities. • The plan shall identify adequate safety and fire suppression devices for construction-related activities involving toxic, flammable, or explosive materials (including refueling construction vehicles and equipment). Such devices shall be readily accessible on the project site, as specified by the County's Fire Department and per the Uniform Building Code and Uniform Fire Code. The plan shall be included as part of all contractor specifications and final construction plans to the satisfaction of the appropriate agency. The plan shall also identify requirements for notices to federal and local emergency response authorities and shall include emergency response plans. <p>Prior to construction, all contractor and subcontractor personnel shall receive training regarding the components of the HMMP, as well as applicable environmental laws and regulations related to hazardous materials handling, storage, and spill prevention and response measures.</p> <p>SDG&E shall designate an environmental field representative who shall be on site to observe, enforce, and document adherence to the plan for all construction activities. The plan shall be submitted to BLM and CPUC at least 30 days prior to construction.</p>
Location	ECO Substation Project site and all project components
Monitoring/Reporting Action	CPUC and BLM will ensure that these measures are carried out throughout construction.
Responsible Agency	CPUC/BLM
Timing	Plan in effect throughout construction
Mitigation Measure	<p>HAZ-1b. Health and Safety Program. Prior to approval of final construction plans, SDG&E shall prepare a Health and Safety Program for each applicable phase of the project (i.e., construction, operation, and decommissioning). The program shall be developed to protect both workers and the general public during all phases of the project. The program shall be implemented to educate construction workers about the hazards associated with the particular project site and the safety measures that must be taken to prevent injury. The program shall include standards regarding occupational safety, safe work practices for each task, hazard training requirements for workers, and mechanisms for documentation and reporting.</p> <p>Regarding occupational health and safety, the program should identify all applicable federal and state occupational safety standards; establish safe work practices for each task (e.g., requirements for personal protective equipment and safety harnesses; OSHA standard practices for safe use of explosives and blasting agents; and measures for reducing occupational EMF exposures); establish fire safety evacuation procedures; and define safety performance standards (e.g., electrical system standards and lightning protection standards). The program should include a training program to identify hazard training</p>

	<p>requirements for workers for each task and establish procedures for providing required training to all workers. The program should include worker training regarding how to identify potentially contaminated soils and/or groundwater. Documentation of training and a mechanism for reporting serious accidents to appropriate agencies shall be established. The program should identify requirements for temporary fencing around staging areas, storage yards, and excavation areas during construction or decommissioning activities. Such fencing should be designed to restrict transient traffic, off-highway vehicle (OHV) use, and the general public from accessing areas under construction and should be removed once construction or decommissioning activities are complete. The program should also identify appropriate measures to be taken during operation of the project to limit public access to hazardous facilities (e.g., permanent fencing, locked access). In order to inform workers and the general public of the dangers of abandoned mines, pamphlets with the "Stay Out-Stay Alive" information used by federal and state governments should be distributed as part of the program.</p> <p>SDG&E shall designate an environmental field representative who shall be on site to observe, enforce, and document adherence to the program for all construction activities. The program shall be submitted to BLM and CPUC at least 30 days prior to construction. In addition, SDG&E shall implement Sempra Energy's Health and Safety Program during the operational phase of the project.</p>
Location	ECO Substation Project site and all project components
Monitoring/Reporting Action	CPUC and BLM will ensure that these measures are carried out throughout construction.
Responsible Agency	CPUC and BLM
Timing	Program in effect throughout construction
Mitigation Measure	<p>HAZ-1c. Waste Management Plan. Prior to approval of final construction plans, SDG&E shall prepare a Waste Management Plan, which shall determine waste procedures, waste storage locations, waste-specific management and disposal requirements, inspection procedures, and waste minimization procedures.</p> <p>SDG&E shall designate an environmental field representative who shall be on site to observe, enforce, and document adherence to the plan for all construction activities. The plan shall be submitted to CPUC and BLM at least 30 days prior to construction.</p>
Location	ECO Substation Project site and all project components
Monitoring/Reporting Action	CPUC and BLM will ensure that these measures are carried out throughout construction.
Responsible Agency	CPUC/BLM
Timing	Plan in effect throughout construction
Mitigation Measure	<p>HAZ-1d. Testing for environmental hazards associated with demolition. Prior to demolition of the existing Boulevard Substation and surrounding buildings, soil, conduit, equipment, and structures shall be tested for environmental hazards, including oil, lead-based paint, and asbestos. An asbestos and lead-based paint survey shall be performed by a Cal/OSHA certified Asbestos Consultant/Site Surveillance Technician and a California Department of Public Health (CDPH) certified Inspector/Assessor, Sampling Technician, or Program Monitor. The survey shall be performed in accordance with the applicable state guidance to identify asbestos containing materials (ACM), asbestos containing construction materials (ACCM), and lead-based paint (LBP) as defined in the California Code of Regulations. If ACM, ACCM, or LBP is identified, abatement and disposal of all regulated materials shall be performed by a Cal/OSHA/CDPH certified abatement contractor prior to or during the demolition process.</p>
Location	ECO Substation Project site and all project components
Monitoring/Reporting Action	CPUC and BLM will ensure that these measures are carried out throughout construction.
Responsible Agency	CPUC/BLM
Timing	Program in effect throughout construction
APM	<p>HAZ-2. Phase II Environmental Site Assessment. A Phase II Environmental Site Assessment (ESA) shall be conducted on the existing Boulevard Substation parcel after the equipment has been removed in order to determine if there is any subsurface contamination.</p>

	If required by the Phase II ESA investigation, remediation shall occur in accordance with all applicable federal, state, and local regulations.
Location	Existing Boulevard Substation site
Monitoring/Reporting Action	CPUC will ensure that these measures are carried out at the appropriate time.
Responsible Agency	CPUC
Timing	After equipment is removed from existing Boulevard Substation parcel
APM	HAZ-3. Boulevard Substation Dismantling. During the Boulevard Substation dismantling process, the existing equipment to be dismantled shall be tested in accordance with applicable federal, state, and local standards to determine appropriate recycle, reuse, or disposal alternatives for the equipment.
Location	Existing Boulevard Substation site
Monitoring/Reporting Action	CPUC will ensure that these measures are carried out at the appropriate time.
Responsible Agency	CPUC
Timing	During the Boulevard Substation dismantling process
Mitigation Measure	<p>HAZ-2a. Test for pesticides/herbicides on currently or historically farmed land. In areas where the land has been or is currently being farmed, soil samples shall be collected and tested for herbicides, pesticides, and fumigants to determine the presence and extent of any contamination. The sampling and testing shall be prepared in consultation with the County Agricultural Commission, conducted by an appropriate California licensed professional, and sent to a California Certified Laboratory. A report documenting the areas proposed for sampling and the process used for sampling and testing shall be submitted to the CPUC and BLM for review and approval at least 60 days prior to construction. Results of the laboratory testing and recommended resolutions for handling and excavating materials found to exceed regulatory requirements shall be submitted to the CPUC and BLM at least 30 days prior to construction.</p> <p>If soil or groundwater contamination is confirmed as a result of soil sampling, SDG&E shall immediately stop work and notify the designated environmental field representative. All work in the contaminated area shall cease, the work shall be cordoned off, and the environmental field representative shall implement appropriate health and safety procedures. Work outside the contaminated area may continue as determined by the environmental field representative.</p> <p>Excavated materials containing elevated levels of pesticides or herbicides would require special handling and disposal according to procedures established by the regulatory agencies. Effective dust control suppression procedures shall be used in construction areas to reduce airborne emissions of these contaminants and reduce the risk of exposure to workers and the public. SDG&E shall contact the appropriate regulatory agencies for the State of California (e.g., DTSC or RWQCB) and the County to plan options for handling, treating, and/or disposing of materials.</p>
Location	ECO Substation Project site and all project components
Monitoring/Reporting Action	CPUC and BLM will ensure that these measures are carried out at the appropriate time.
Responsible Agency	CPUC/BLM
Timing	Measures in effect throughout construction
Mitigation Measure	<p>HAZ-2b. Contingency plan for encountering contaminated soils. If soil or groundwater contamination is suspected or encountered during grading or excavation activities (e.g., unusual soil discoloration or strong odor), SDG&E's contractors or subcontractors shall immediately stop work and notify the designated environmental field representative. All work in the area of suspected contamination shall cease, the work area shall be cordoned off, and the environmental field representative shall implement appropriate health and safety procedures. Work outside the suspected area may continue as determined by the environmental field representative.</p> <p>Preliminary samples of the soil, groundwater, or suspected material shall be taken by OSHA-trained individuals and sent to a California Certified Laboratory for characterization. If the sample testing determines that contamination is not present, work shall continue at the</p>

	<p>previously suspected site. If contamination is found above regulatory limits, however, the appropriate regulatory agency (e.g., RWQCB or Certified Unified Program Agency (CUPA)) responsible for responding to and providing environmental oversight of the region shall be notified in accordance with state or local regulations. In addition, SDG&E shall contact the appropriate regulatory agencies for the State of California (e.g., DTSC or RWQCB) and the County to plan options for handling, treating, and/or disposing of materials.</p> <p>Documentation of the suspected contamination shall be made in the form of a report, identifying the location and potential contamination, as well as the process used for sampling. Results of laboratory testing and recommended resolutions for handling and excavating materials found to exceed regulatory requirements shall be submitted to the BLM and CPUC for review and approval.</p>
Location	ECO Substation Project site and all project components
Monitoring/Reporting Action	CPUC and BLM will ensure that these measures are carried out at the appropriate time.
Responsible Agency	CPUC/BLM
Timing	Plan in effect throughout construction
Mitigation Measure	<p>HAZ-3. Soil testing for lead contamination. Soil samples shall be collected and tested from all excavation sites within 500 feet of any area identified as a current or historical shooting range to determine the presence of lead and extent of any contamination. The sampling and testing shall be conducted by a California licensed professional and sent to a California Certified Laboratory. A report documenting the areas proposed for sampling and the process used for sampling and testing shall be submitted to the project's lead agency for review and approval at least 60 days prior to excavation. Results of the laboratory testing and recommended resolutions for handling and excavating any materials found to exceed regulatory requirements shall be submitted to the project's lead agency 30 days prior to excavation.</p> <p>In addition, a Soil/Lead Contamination Handling Plan shall be prepared to address appropriate procedures in the event that lead contamination is discovered as a result of soil testing. This plan shall contain provisions for a lead-awareness program for workers, as well as guidelines for the identification, removal, transport, and disposal of lead-impacted materials. This plan shall also emphasize that all activities within, or in close proximity to, contaminated areas must follow applicable environmental and hazardous waste laws and regulations. This plan shall be submitted to the project's lead agency 30 days prior to excavation.</p> <p>Documentation of any confirmed or suspected contamination identified during testing or excavation shall be made in the form of a report identifying the location and potential contamination, as well as the process used for sampling. Results of laboratory testing and recommended resolutions for handling and excavating materials found to exceed regulatory requirements shall be submitted to the CPUC and BLM for review and approval.</p>
Location	ECO Substation Project site
Monitoring/Reporting Action	CPUC and BLM will ensure that these measures are carried out at the appropriate time.
Responsible Agency	CPUC/BLM
Timing	Prior to initiating excavation or grading activities within 500 feet of any area identified as a current or historical shooting range; plan in effect throughout construction
Mitigation Measure	<p>HAZ-4a. Safety Assessment. Prior to commencing construction activities, SDG&E shall conduct a safety assessment to describe potential safety issues associated with the project, how safety prevention measures would be implemented, where medical aid kits would be located, the appropriate response action for each safety hazard, and procedures for notifying the appropriate authorities. The assessment shall address issues such as site access, construction hazards, safe work practices, security, heavy equipment transportation, traffic management, emergency procedures, and fire control.</p>
Location	ECO Substation Project site and all project components
Monitoring/Reporting Action	CPUC and BLM will ensure that these measures are carried out at the appropriate time.
Responsible Agency	CPUC/BLM

Timing	Plan in effect throughout construction
Mitigation Measure	<p>HAZ-4b. Blasting Plan. If blasting is deemed necessary for the construction of project components, SDG&E shall conduct a pre-blast survey and prepare a blasting plan. A written report of the pre-blast survey and final blasting plan shall be provided to the appropriate regulatory agency and approved prior to any rock removal using explosives. In addition to any other requirements established by the appropriate regulatory agencies, the pre-blast survey and blasting plan shall meet the following conditions, as well as those outlined in Mitigation Measure NOI-1:</p> <p>The pre-blast survey shall be conducted for structures within a minimum radius of 1,000 feet from the identified blast site to be specified by SDG&E. Sensitive receptors that could reasonably be affected by blasting shall be surveyed as part of the pre-blast survey. Notification that blasting would occur shall be provided to all owners of the identified structures to be surveyed prior to commencement of blasting. The pre-blast survey shall be included in the final blasting plan.</p> <p>The final blasting plan shall address air-blast limits, ground vibrations, and maximum peak particle velocity for ground movement, including provisions to monitor and assess compliance with the air-blast, ground vibration, and peak particle velocity requirements. The blasting plan shall meet criteria established in Chapter 3 (Control of Adverse Effects) in the Blasting Guidance Manual of the U.S. Department of Interior Office of Surface Mining Reclamation and Enforcement.</p> <p>The blasting plan shall outline the anticipated blasting procedures for the removal of rock material at the proposed turbine foundation locations. The blasting procedures shall incorporate line control to full depth and controlled blasting techniques to create minimum breakage outside the line control and maximum rock fragmentation within the target area. Prior to blasting, all applicable regulatory measures shall be met. SDG&E, its general contractor, or its subcontractor (as appropriate) shall keep a record of each blast for at least 1 year from the date of the last blast.</p>
Location	ECO Substation Project site and all project components
Monitoring/Reporting Action	CPUC and BLM will ensure that these measures are carried out at the appropriate time.
Responsible Agency	CPUC/BLM
Timing	Plan in effect throughout construction
Mitigation Measure	<p>HAZ-5a. Spill Prevention Control and Countermeasure Plan. Prior to the facility going online and becoming operational, SDG&E shall prepare an SPCC plan to address proper procedures for storage, handling, spill response, and disposal of hazardous materials for the ongoing operation of the project. The SPCC plan shall meet all requirements outlined in Title 40 of the Code of Federal Regulations, Part 112 (40 CFR Part 112). The SPCC plan shall be reviewed and approved by the appropriate agency's engineering department and certified by a Registered Professional Engineer.</p> <p>The SPCC plan shall identify operating procedures that the facility will implement to prevent oil spills; control measures installed to prevent oil from leaving the project site; and countermeasures to contain, clean up, and mitigate the effects of an oil spill. A copy of the plan shall be kept on site at the facility and made available for review by the U.S. EPA Regional Administrator during normal business hours. The plan shall be amended as required under 40 CFR Part 112. The plan shall be reviewed, evaluated, and updated (if necessary) every 5 years.</p>
Location	ECO Substation Project site and all project components
Monitoring/Reporting Action	CPUC and BLM will ensure that these measures are carried out at the appropriate time.
Responsible Agency	CPUC/BLM
Timing	Plan in effect throughout operation of facility
Mitigation Measure	<p>HAZ-5b. Hazardous Materials Business Plan. Prior to the facility going online and becoming operational, SDG&E shall prepare an HMBP in accordance with all related requirements in California Health and Safety Code, Chapter 6.95, Articles 1 and 2. The HMBP shall contain basic information on the location, type, and quantity of hazardous</p>

	materials stored or used by the facility, as well as the health risks associated with each hazardous material. The HMBP shall include three components: an inventory and site map, emergency response plan, and employee training. The plan shall be reviewed and recertified every year and amended as required by California Health and Safety Code, Chapter 6.95, Articles 1 and 2.
Location	ECO Substation Project site
Monitoring/Reporting Action	CPUC will ensure that these measures are carried out at the appropriate time.
Responsible Agency	CPUC
Timing	Plan in effect throughout operation of facility
Mitigation Measure	PS-1a. Minimize electromagnetic and public safety communications. The project shall be designed to minimize EMI (e.g., impacts to radar, microwave, television, and radio transmissions) and comply with FCC regulations. Signal strength studies shall be completed prior to construction and conducted when proposed locations have the potential to impact transmissions. Potential interference with public safety communications systems (e.g., radio traffic related to emergency activities) shall be avoided. In the event the project results in EMI, SDG&E or the facility operator shall work with the owner of the impacted communications system to resolve the problem. Potential measures may include realigning the existing antenna or installing relays to transmit the signal around the project. Additional warning information may also need to be conveyed to aircraft with onboard radar systems so that echoes from project equipment can be quickly recognized.
Location	ECO Substation Project site and all project components
Monitoring/Reporting Action	CPUC and BLM will ensure that these measures are carried out at the appropriate time.
Responsible Agency	CPUC/BLM
Timing	Measures in effect throughout construction and operation
Mitigation Measure	PS-1b. Limit conductor surface potential. Prior to construction, SDG&E shall specify and implement designs that limit the conductor surface electric gradient in accordance with the Institute of Electrical and Electronic Engineers (IEEE) Radio Noise Design Guide.
Location	ECO Substation Project site and all project components
Monitoring/Reporting Action	CPUC and BLM will ensure that these measures are carried out at the appropriate time.
Responsible Agency	CPUC/BLM
Timing	Measures in effect throughout construction and operation
Mitigation Measure	PS-1c. Document complaints of broadcast interference. After energizing the transmission line, SDG&E shall respond to and document all radio/television/equipment interference complaints received and the responsive actions taken. These records shall be made available to the appropriate regulatory agency for review upon request. SDG&E shall refer all unresolved disputes to the approving agency.
Location	ECO Substation Project site and transmission line
Monitoring/Reporting Action	CPUC and BLM will ensure that these measures are carried out at the appropriate time.
Responsible Agency	CPUC/BLM
Timing	Plan in effect throughout operation of facility
Mitigation Measure	PS-2. Determine proper grounding procedures and implement appropriate grounding measures. As part of the project siting and construction process, SDG&E's contractor(s) shall identify objects (such as fences, conductors, and pipelines) that have the potential for induced voltages and work with the affected parties to determine proper grounding procedures (Note: CPUC General Order 95 and the NESC do not have specific requirements for grounding). SDG&E shall install all necessary grounding measures prior to energizing the line. At least 30 days prior to energizing the line, SDG&E shall notify in writing all property owners within and adjacent to the project's ROW regarding the date the line is to be energized, subject to the review and approval of the appropriate regulatory agency. The written notice shall provide a contact person and telephone number for answering questions regarding the line and guidelines on what activities should be limited or restricted within the ROW. The written notice shall describe the nature and operation of the line, and SDG&E's responsibilities with respect to grounding all conducting objects. In

	<p>addition, the notice shall describe the property owner's responsibilities with respect to notification for any new objects that may require grounding and guidelines for maintaining the safety of the ROW. SDG&E shall respond to and document all complaints received and the responsive action taken. These records shall be made available to the appropriate regulatory agency for review upon request. SDG&E shall refer all unresolved disputes to the approving agency for resolution.</p>
Location	ECO Substation Project site and all project components
Monitoring/Reporting Action	CPUC and BLM will ensure that these measures are carried out at the appropriate time.
Responsible Agency	CPUC/BLM
Timing	As part of project siting and construction process, but prior to approval of final construction plans; plan in effect throughout construction and operation

Table D.11-21

Mitigation Monitoring, Compliance, and Reporting – ECO Substation Project – Air Quality

Mitigation Measure	<p>AQ-1. The following measures shall be incorporated to reduce fugitive dust and other criteria pollutant emissions during construction activities:</p> <ul style="list-style-type: none"> • Rock aprons or rattle plates will be installed as needed at the intersection of dirt access roads and paved public roadways to clean the tires of equipment prior to leaving the site. • All active construction areas, unpaved access roads, parking areas, and staging areas will be watered or stabilized with nontoxic soil stabilizers as needed to control fugitive dust. • All public streets will be swept or cleaned with mechanical sweepers if visible soil material is carried onto them by construction activities or vehicles. • Exposed stockpiles (e.g., dirt, sand, etc.) will be covered and/or watered or stabilized with nontoxic soil binders as needed to control emissions. • Trucks transporting bulk materials will be completely covered unless 2 feet of freeboard space from the top of the container is maintained with no spillage and loss of material. In addition, the cargo compartment of all haul trucks will be cleaned and/or washed at the delivery site after removal of the bulk material. • Movement of bulk material handling or transfer will be stabilized prior to handling or at a point of transfer with application of sufficient water, chemical stabilizers, or by sheltering or enclosing the operation and transfer line. • Traffic speeds on unpaved roads and the ROW will be limited to 15 miles per hour. • Vehicle idling time will be limited to a maximum of 5 minutes for vehicles and construction equipment, except where idling is required for the equipment to perform its task. • Road graders used during site development activities will be equipped with a CARB-verified Level 2 diesel emission control strategy or a comparable diesel-control technology that will reduce inhalable particulate matter (PM₁₀) emissions by 50% or more. • If suitable park-and-ride facilities are available in the project vicinity, construction workers will be encouraged to carpool to the job site to the extent feasible. The ability to develop an effective carpool program for the project would depend upon the proximity of carpool facilities to the job site, the geographical commute departure points of construction workers, and the extent to which carpooling would not adversely affect worker show-up time and the project's construction schedule. • All off-road, diesel-powered construction equipment will be kept in good tune and maintained according to the manufacturer's specifications.
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	<ul style="list-style-type: none"> • Construction equipment will use electric-powered motors where feasible. • The construction contractor will prepare and implement a high-wind dust control plan and terminate soil disturbance when winds exceed 25 miles per hour. • The construction contractor will require 90-day, low-NO_x tune-ups for off-road equipment. • Diesel particulate filters will be utilized on heavy equipment where feasible. • Construction activities will comply with all applicable SDAPCD rules and regulations.
Location	ECO Substation Project site and all project components.
Monitoring/Reporting Action	CPUC and BLM will ensure that these measures are carried out during project construction.
Responsible Agency	CPUC/BLM
Timing	Plan in effect throughout construction.
Mitigation Measure	AQ-2. All off-road diesel engines with a rated output of greater than 50 horsepower will, at a minimum, meet the Tier 2 California Emissions Standards for Off-Road Compression Ignition Engines. If reasonably available, Tier 3 engines will be employed. SDG&E shall provide verification that the construction fleet meets the requirements identified as part of this mitigation measure.
Location	ECO Substation Project site and all project components.
Monitoring/Reporting Action	CPUC and BLM will ensure that all off-road equipment meets Tier 2 (or Tier 3) standards.
Responsible Agency	CPUC/BLM
Timing	Plan in effect throughout construction.

**Table D.12-6
Mitigation Monitoring, Compliance, and Reporting – ECO Substation Project – Water Resources**

<p>Mitigation Measure</p>	<p>HYD-1: A Stormwater Pollution Prevention Plan shall be prepared to reduce soil erosion during construction. In compliance with the new SWRCB's NPDES General Permit for Storm Water Associated with Construction Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002, effective July 1, 2010), SDG&E shall prepare a project-specific SWPPP before construction begins, and it shall be kept on site throughout the construction process. The SWPPP shall include the following:</p> <ul style="list-style-type: none"> • Identification of pollutant sources and non-stormwater discharges associated with construction activity. • Specifications for BMPs that shall be implemented during project construction to minimize the potential for accidental releases and runoff from the construction areas, including temporary construction yards, pull sites, and helicopter landing zones. Specifications shall include: <ul style="list-style-type: none"> ○ A plan for training construction crews ○ A plan for monitoring and inspecting BMPs and site conditions ○ A plan for sampling and analysis of pollutants (as necessary). • Where applicable, the following shall apply: <ul style="list-style-type: none"> ○ Construction impacts shall be minimized to the greatest extent possible ○ Upon completion of construction phases, roadways shall be reduced to minimum widths needed ○ Areas disturbed during construction shall be revegetated to their natural states ○ Construction roadways shall follow natural contours to the extent practical and be designed to minimize stream crossings, avoid wetlands, and maintain surface water runoff patterns to prevent erosion ○ CDFG guidelines for culverts shall be followed to minimize long-term maintenance and meet a 10-year rain event to minimize trapping of sediment. • Where applicable, the following shall apply to reduce the release of contaminants to the local surface and groundwater: <ul style="list-style-type: none"> ○ For on-site storm drain inlets, mark all inlets with the words "No Dumping! Flows to Sensitive Habitat" or similar. ○ For landscaping, show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained. Show self-retaining landscape, if any. State that final landscape plans will preserve existing native trees, shrubs, and ground cover will cover maximum extent possible. ○ Design landscaping to minimize irrigation, runoff, and use of pesticides and fertilizers that contribute to stormwater pollution. Select plants that are appropriate for site soils, slopes, climate, wind, sun, rain, land use, ecological consistency, and plant interactions. ○ For outdoor storage of equipment or materials, show storage areas and how they will be covered and what structural features or grading will be incorporated to prevent pollutants from discharging from the site. ○ Designate areas for vehicle/equipment repair, maintenance, and cleaning, and document how these areas will be contained to prevent pollutant runoff. ○ For leaking or failure of large power transformers, have 100% containment at each power transformer.
<p>Location</p>	<p>All areas disturbed by construction activities.</p>
<p>Monitoring/Reporting Action</p>	<p>CPUC and BLM will review SDG&E's SWPPP and ensure its implementation</p>
<p>Effectiveness Criteria</p>	<p>Construction and BMPs in place during construction, and kept operating as long as needed.</p>

	Mitigation measure is effective if water quality near the project is maintained
Responsible Agency	CPUC/BLM
Timing	Prior to and during construction.
Mitigation Measure	HYD-2: Avoidance and preventative measures to protect local groundwater during excavation. Prior to excavation, a qualified geologist/hydrologist shall determine the depth of groundwater in areas where excavation would occur. The project shall be designed to avoid areas of shallow groundwater where feasible. In such areas where groundwater cannot be avoided during excavation, the site shall be dewatered during construction, and materials that could contaminate the groundwater shall be kept at least 200 feet from the dewatering activities. An NPDES permit shall be obtained for proper disposal of water. Treatment may be required prior to discharge.
Location	Along entire Project Site
Monitoring/Reporting Action	CPUC and BLM will ensure dewatering is completed consistent with NPDES permit requirements.
Effectiveness Criteria	Approval and implementation of the construction plans
Responsible Agency	CPUC/BLM
Timing	Prior to and during construction.
Mitigation Measure	HYD-3: Identification of sufficient water supply Prior to construction SDG&E will prepare comprehensive documentation that identifies one or more confirmed, reliable water sources that when combined meet the project's full water supply construction needs. Documentation will consist of the following: <ul style="list-style-type: none"> • <i>Preparation of a groundwater study.</i> For well water that is to be used, the applicant will commission a groundwater study by a qualified hydrogeologist to assess the existing condition of the underlying groundwater/aquifer and all existing wells (with owner's permission) in the vicinity of proposed well location/water sources. The groundwater study will evaluate aquifer properties and aquifer storage. The groundwater study will estimate short and long-term well water supplies from each well proposed to be used, and documentation indicating that each well is capable of producing the total amount of water to be supplied for construction from each well. The groundwater study will estimate short- and long-term impacts of the use of the well(s) on the local groundwater production (short-term extraction for construction water and ongoing O&M water), on all project wells, and on other wells in the project area. The groundwater study will include an assessment of the potential for subsidence brought on by project-related water use in the area. The applicant will provide demonstration of compliance with all applicable laws and regulations and will obtain a County of San Diego Major Use Permit for use of any proposed well prior to construction. • <i>Documentation of Purchased Water Source(s).</i> For water that is to be purchased from one or more water/utility district(s), the applicant shall provide written documentation from such district(s) indicating the total amount of water to be provided and the time frame that the water will be made available to the project. The Sweetwater Authority has provided written confirmation of water availability to support the project. Total confirmed water supplies from the combination of above documented sources shall equal the total gallons of water needed through construction of the project.
Location	Along entire Proposed Project site
Monitoring/Reporting Action	CPUC and BLM will review SDG&E's groundwater study and ensure its implementation
Effectiveness Criteria	Water Study verified groundwater quantities and Will Serve Letter quantities add up to equal estimated project construction water needs
Responsible Agency	CPUC/BLM
Timing	Submittal of groundwater study to CPUC and BLM a minimum 60 days prior to project design being completed.
Mitigation Measure	HYD-4: Preparation of a Stormwater Management Plan. SDG&E shall commission an SWMP in compliance with the County of San Diego Major Storm Water Management Plan. The SWMP shall be project specific and developed in conjunction with project design. The SWMP shall include site design BMPs that, where applicable, shall:

	<ul style="list-style-type: none"> • Maintain predevelopment rainfall runoff characteristics. The BMPs shall: <ul style="list-style-type: none"> ○ Locate the project and road improvement alignments to avoid or minimize impacts to receiving waters or to increase the preservation of critical (or problematic) areas such as floodplains, steep slopes, wetlands, and areas with erosive or unstable soil conditions ○ Minimize the project's impervious footprint. ○ Conserve natural and critical areas, such as floodplains, steep slopes, wetlands, and areas with erosive and unstable soil conditions ○ Where landscape is proposed, drain rooftops, impervious sidewalks, walkways, trails, and patios into adjacent landscaping ○ Design and locate roadway structures and bridges to reduce the amount of work in live streams, and minimize the construction impacts ○ Implement the following methods to minimize erosion from slopes: <ul style="list-style-type: none"> ▪ Disturb existing slopes only when necessary ▪ Minimize cut-and-fill areas to reduce slope lengths ▪ Incorporate retaining walls to reduce steepness of slopes or to shorten slopes ▪ Provide benches or terraces on high cut-and-fill slopes to reduce concentration of flows ▪ Round and shape slopes to reduce concentrated flow ▪ Collect concentrated flows in stabilized drains and channels. • Protect slopes and channels. The BMPs shall: <ul style="list-style-type: none"> ○ Minimize disturbances to natural drainages ○ Convey runoff safely from the tops of slopes ○ Vegetate slopes with native or drought-tolerant vegetation ○ Stabilize permanent channel crossings ○ Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters. ○ Include other design principles that are comparable and equally effective. • The SWMP shall also incorporate Low Impact Development Features into the project, including but not limited to: <ul style="list-style-type: none"> ○ Preserve well-draining soils (Type A or B) ○ Preserve significant trees ○ Set back development envelope from drainages ○ Restrict heavy construction equipment access to planned green/open space areas ○ Re-till soils compacted by construction vehicles/equipment ○ Collect and reuse upper soil layers of development site containing organic materials ○ Curb cuts to landscaping ○ Use rural swales ○ Use concave median ○ Use permeable pavements ○ Pitch pavements toward landscaping ○ Use cisterns and rain barrels ○ Downspout to swale ○ Use vegetated roofs ○ Use soil amendments ○ Reuse native soils ○ Use smart irrigation systems
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	<p>o Use street trees (HDR 2009b).</p> <p>The SWMP shall ensure that the project follows CDFG guidelines for culverts to minimize long-term maintenance and meet a 10-year rain event to minimize the trapping of sediment.</p>
Location	Along entire Proposed Project Site
Monitoring/Reporting Action	San Diego County Department of Public Works shall ensure the SWMP is in compliance with the County of San Diego Major Storm Water Management Plan and its implementation as written.
Effectiveness Criteria	Approval and implementation of the SWMP
Responsible Agency	CPUC/BLM
Timing	A SWMP that has been reviewed and approved by the San Diego County Department of Public Works shall be submitted to CPUC and BLM 30 days prior to project construction
Mitigation Measure	<p>HYD-5: Implementation of creek-crossing procedures. Where creek crossings can be completed during dry season, with no flows present in the creek, seasonally timed restorative open trenching will be completed. This procedure will use minimum trench widths. Trench cut material will not be placed outside of the creek bed and outside of 100-year inundated areas. Trench fill will be compacted and replaced to existing conditions, including matching existing creek bed gradations, and restoring vegetation. Open trenching restoration will be completed prior to any wet season flows, and will include anti-erosion action plans for any unplanned rainfall during construction. The applicant shall obtain all required permits prior to completing open trenching through drainages. In any case, flows will be isolated from open trenching by best management practices mandated by the General Construction Permit. Areas of trenching would be restored and/or vegetated at completion of work. Where creek crossing cannot be completed during the dry season creek crossing shall use jack-and-bore procedures to avoid direct impacts and shall be conducted in a manner that does not result in sediment-laden discharge or hazardous materials release to the water body. The following measures shall be implemented during horizontal boring (jack-and-bore) operations:</p> <p>(1) Site preparation shall begin no more than 10 days prior to initiating horizontal bores to reduce the time soils are exposed adjacent to creeks and drainages.</p> <p>(2) Trench and/or bore pit spoil shall be stored a minimum of 25 feet from the top of the bank or wetland/riparian boundary. Spoils shall be stored behind a sediment barrier and covered with plastic or otherwise stabilized (i.e., tackifiers, mulch, or detention).</p> <p>(3) Portable pumps and stationary equipment located within 100 feet of a water resource (i.e., wetland/riparian boundary, creeks, and drainages) shall be placed within secondary containment with adequate capacity to contain a spill (i.e., a pump with 10-gallon fuel or oil capacity should be placed in secondary containment capable of holding 15 gallons). A spill kit shall be maintained on site at all times.</p> <p>(4) Immediately following backfill of the bore pits, disturbed soils shall be seeded and stabilized to prevent erosion, and temporary sediment barriers shall be left in place until restoration is deemed successful.</p> <p>(The applicant shall obtain the required permits prior to conducting creek crossing work. Required permits may include ACOE CWA Section 404, Regional Water Quality Control Board Clean Water Act 401, and CDFG Streambed Alteration Agreement 1602. The applicant shall implement all pre- and post-construction conditions identified in the permits issued. The plan shall be submitted to the CPUC, County of San Diego, and ACOE 60 days prior to construction.</p>
Location	Along underground portion of transmission line, where applicable
Monitoring/Reporting Action	SDG&E to prepare a directional drill plan with associated SWPPP for CPUC, BLM, and ACOE approval prior to construction, when applicable
Effectiveness Criteria	Directional drilling rather than trenching, where applicable
Responsible Agency	CPUC/BLM/ACOE
Timing	Prior to and during construction
Mitigation Measure	<p>HYD-6: Horizontal Directional Drill Contingency Plan. If horizontal directional drilling is to be used during construction SDG&E shall prepare a Horizontal Directional Drill Contingency Plan to address procedures for containing an inadvertent release of drilling fluid (frac-out).</p>

	The plan shall contain specific measures for monitoring frac-outs, for containing drilling mud, and for notifying agency personnel. The plan shall also discuss spoil stockpile management, hazardous materials storage and spill cleanup, site-specific erosion and sediment control, and housekeeping procedures, as described in the SWPPP. The plan shall be submitted to the CPUC, BLM, and ACOE 60 days prior to construction. SDG&E shall obtain the required permits prior to conducting work associated with horizontal directional drilling activities. Required permits may include U.S. Army Corps of Engineers Clean Water Act Section 404, Regional Water Quality Control Board Clean Water Act 401, and CDFG Streambed Alteration Agreement Section 1602. SDG&E shall implement all pre- and post-construction conditions identified in the permits issued for the horizontal directional drilling.
Location	Along underground portion of transmission line, where applicable
Monitoring/Reporting Action	SDG&E to prepare a horizontal direction drill plan with associated SWPPP for CPUC, BLM, and ACOE approval prior to construction, when applicable
Effectiveness Criteria	Approval and implementation of Horizontal Directional Drill Contingency Plan, if necessary
Responsible Agency	CPUC/BLM/ACOE
Timing	Prior to and during construction
Mitigation Measure	HYD-7: Bury power line below 100-year scour depth. At locations where the buried power line is to be at or adjacent to a streambed capable of scour, the power line shall be located below the expected depth of scour from a 100-year flood, or otherwise protected from exposure by scour that, for purposes of this mitigation measure, also includes lateral (stream bank) erosion and potential scour associated with flows overtopping or bypassing a culvert or bridge crossing. During final design, a registered civil engineer with expertise in hydrology, hydraulics, and river mechanics shall make a determination of where the underground line could be at risk of exposure through scour or erosion from a 100-year event.
Location	Along underground portion of transmission line, where applicable
Monitoring/Reporting Action	SDG&E to provide CPUC and BLM with an engineering report, sealed by a civil engineer registered in the State of California, demonstrating project components that may reasonably be subject to erosion during the life of the project. The report shall also provide plans for protection from scour, as well as an engineering demonstration that the project components will not induce erosion onto adjacent property. CPUC and BLM to monitor to verify compliance during construction.
Effectiveness Criteria	Project components to withstand scour with no adverse effect on adjacent property.
Responsible Agency	CPUC/BLM
Timing	Engineering evaluation, and associated scour/erosion protection design plans, shall be submitted to the CPUC and BLM for review and approval 60 days prior to the initiation of construction. Compliance to be ensured during construction.

Table D.13-9**Mitigation Monitoring, Compliance, and Reporting – ECO Substation Project – Geology, Mineral Resources, and Soils**

Mitigation Measure	GEO-1: Erosion Control and Sediment Transport Control Plan. The Erosion Control and Sediment Transport Control Plan would be included with the project grading plans submitted to the County for review and comment. The plan would be submitted to CPUC and BLM a minimum of 60 days prior to project design and would be prepared in accordance with the standards provided in the Manual of Erosion and Sedimentation Control Measures and consistent with practices recommended by the Resource Conservation District of Greater San Diego County. Implementation of the plan would help stabilize soil in graded areas and waterways and reduce erosion and sedimentation. The plan would designate BMPs that would be implemented during construction activities. Erosion control efforts, such as hay bales, water bars, covers, sediment fences, sensitive area access restrictions (e.g.,
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	flagging), vehicle mats in wet areas, and retention/settlement ponds, would be installed before extensive soil clearing and grading begins. Appropriate stabilization measures, such as mulching or seeding, would be used to protect exposed areas during construction activities. Revegetation plans, the design and location of retention ponds, and grading plans would be submitted to the CDFG and ACOE for review in the event of construction near waterways. In disturbed areas where construction equipment has caused compaction of soils (e.g., staging areas, structure sites, temporary spur roads, etc.), soils would be decompacted as necessary prior to seeding, and reclamation would occur to enhance revegetation and reduce potential for erosion.
Location	Along entire proposed project site
Monitoring/Reporting Action	CPUC and BLM
Effectiveness Criteria	Implementation of the Erosion Control and Sediment Transport Control Plan
Responsible Agency	CPUC/BLM
Timing	Compliance to be ensured during construction
Mitigation Measure	GEO-2: Conduct geotechnical studies for soils to assess characteristics and aid in appropriate foundation design. The design-level geotechnical studies to be performed by SDG&E shall identify the presence, if any, of potentially detrimental soil chemicals, such as chlorides and sulfates. Appropriate design measures shall be utilized for protection of reinforcement, concrete, and metal-structural components against corrosion, including use of corrosion-resistant materials and coatings, increased thickness of project components exposed to potentially corrosive conditions, and use of passive and/or active cathodic protection systems. The geotechnical studies shall also identify areas with potentially expansive or collapsible soils and include appropriate design features, including excavation of potentially expansive or collapsible soils during construction and replacement with engineered backfill, ground-treatment processes, and redirection of surface water and drainage away from expansive foundation soils. Studies shall conform to industry standards of care and ASTM standards for field and laboratory testing. Design shall conform to applicable sections of the County of San Diego grading codes, CBC, and the standard specifications for public works construction. The geotechnical studies prepared by a certified geologist shall be submitted to CPUC and BLM 60 days prior to construction of proposed structures.
Location	All project components where structures are proposed.
Monitoring/Reporting Action	Results of geotechnical studies are reviewed to ensure that recommendations are implemented during construction.
Effectiveness Criteria	Assurance that proposed structures are not damaged by geologic conditions.
Responsible Agency	CPUC/BLM
Timing	Prior to and during construction.
Mitigation Measure	GEO-3: Conduct geotechnical investigations. The applicant shall perform design-level geotechnical investigations to evaluate the potential for liquefaction, lateral spreading, seismic slope instability, and ground-cracking hazards to affect the approved project and all associated facilities. Where these hazards are found to exist, appropriate engineering design and construction measures that meet CBC and IEEE design parameters shall be incorporated into the project designs. Appropriate measures for project facilities could include construction of pile foundations, ground improvement of liquefiable zones, installation of flexible bus connections, and incorporation of slack in underground cables to allow ground deformations without damage to structures. The geotechnical investigations prepared by a certified geologist shall be submitted to CPUC and BLM 60 days prior to construction of proposed structures.
Location	All project components where structures are proposed
Monitoring/Reporting Action	Results of geotechnical investigations are reviewed to ensure that recommendations are implemented during construction
Effectiveness Criteria	Assurance that proposed structures are not damaged by geologic conditions.
Responsible Agency	CPUC/BLM
Timing	Prior to and during construction.
Mitigation Measure	GEO-4: Facilities inspections conducted following major seismic event. If large levels

	of ground shaking (such as Modified Mercalli Intensity VI or greater) are experienced or a major earthquake (magnitude 6.0 and above) occurs along the Elsinore Fault, a professional licensed geologist, geotechnical engineer, and structural engineer hired by SDG&E shall perform facilities inspections as quickly as possible. Careful examination shall be conducted of all project facilities. Any required repair or needed improvements shall be implemented as soon as feasible to ensure that the integrity of project facilities has not been compromised.
Location	All project components where structures are proposed.
Monitoring/Reporting Action	Results of facilities inspections are reviewed to ensure that recommendations are implemented following a seismic event.
Effectiveness Criteria	Assurance that proposed structures are not damaged by a seismic event and that repairs are completed as soon as feasible.
Responsible Agency	CPUC/BLM
Timing	Completion of inspections as quickly as possible following a seismic event.

Table D.14-7**Mitigation Monitoring, Compliance, and Reporting – ECO Substation Project – Public Services and Utilities**

Mitigation Measure	PSU-1a. Notification of utility service interruption. Prior to construction in which a utility service interruption is known to be unavoidable, SDG&E shall notify members of the public affected by the planned outage by mail of the impending interruption, and shall post flyers informing the public of the service interruption in neighborhoods affected by the planned outage. Copies of notices and dates of public notification shall be provided to the applicable lead agency.
Location	Locations where existing utility services would have planned interruption of services (proposed ECO Substation Project)
Monitoring/Reporting Action	California Public Utilities Commission (CPUC) and BLM to confirm that SDG&E has posted notices/flyers and that copies have been submitted to the CPUC and BLM for review prior to posting.
Effectiveness Criteria	Residents and landowners are informed of planned outages.
Responsible Agency	CPUC/BLM
Timing	CPUC and BLM to verify planned outage noticing by SDG&E prior to the start of project construction in areas where utility service interruption is known to be unavoidable.
Mitigation Measure	PSU-1b. Protect underground utilities. Prior to construction of the transmission/gen-tie line, SDG&E shall submit to the CPUC and BLM written documentation, including evidence of review by the appropriate jurisdictions, including the following: <ul style="list-style-type: none"> • Construction plans designed to protect existing utilities and that show the dimensions and location of the finalized alignment • Records that the applicant provided the plans to affected jurisdiction for review, revision, and final approval • Evidence that the project meets all necessary local requirements • Evidence of compliance with design standards • Copies of necessary permits, agreements, or conditions of approval • Records of discretionary decisions made by the appropriate agencies.
Location	Along the entire transmission line route (proposed ECO Substation Project)
Monitoring/Reporting Action	CPUC and BLM to confirm receipt of written documentation from SDG&E.
Effectiveness Criteria	Disruption of existing utilities during construction is minimized.
Responsible Agency	CPUC/BLM
Timing	SDG&E to submit documentation to CPUC and BLM prior to construction of transmission lines
Mitigation Measure	PSU-1c. Coordinate with utility providers. SDG&E shall coordinate with all applicable utility providers

	with facilities located within or adjacent to the project to ensure that design does not conflict with other facilities prior to construction. In the event of a conflict, the project will be aligned vertically and/or horizontally as appropriate to avoid other utilities and provide adequate operational and safety buffering. Alternately, the other existing facilities may be relocated. Long-term operations and maintenance of the project will be negotiated through easement, purchased ROW, franchise agreement, or joint use agreement.
Location	Along the entire transmission line route associated with the proposed ECO Substation Project.
Monitoring/Reporting Action	CPUC and BLM to confirm that SDG&E has coordinated with all potentially affected utility providers
Effectiveness Criteria	Utilities are contacted regarding construction plans and existing facilities are avoided during construction.
Responsible Agency	CPUC/BLM
Timing	CPUC and BLM to verify coordination efforts at final design.

**Table D.15-8
Mitigation Monitoring, Compliance, and Reporting – ECO Substation Project – Fire and Fuels Management**

Mitigation Measure	<p>FF-1: Develop and implement a Construction Fire Prevention/Protection Plan. San Diego Gas & Electric Company (SDG&E) shall develop a multiagency Construction Fire Prevention/Protection Plan in consultation with the California Department of Forestry and Fire Protection (CAL FIRE), San Diego Rural Fire Protection District (SDRFPD), and San Diego County Fire Authority (SDCFA) to the satisfaction of the CPUC. SDG&E shall monitor construction activities to ensure implementation and effectiveness of the plan. The final plan will be approved by the CPUC prior to the initiation of construction activities and shall be implemented during all construction activities by SDG&E. At minimum, the plan will include the following:</p> <ul style="list-style-type: none"> • Procedures for minimizing potential ignition <ul style="list-style-type: none"> ○ vegetation clearing ○ fuel modification establishment ○ parking requirements ○ smoking restrictions ○ hot work restrictions • Red Flag Warning restrictions • Fire coordinator role and responsibility • Fire suppression equipment on site at all times work is occurring • Requirements of Title 14 of the California Code of Regulations (CCR), Article 8 #918 "Fire Protection" for private land portions • Access road widening (28-foot County roads, 18-foot-wide spur roads) • Applicable components of the SDG&E Wildland Fire Prevention and Fire Safety Electric Standard Practice (2009) • Emergency response and reporting procedures • Emergency contact information • Worker education materials; kick-off and tailgate meeting schedules • Other information as provided by CAL FIRE, SDRFPD, SDCFA, CPUC, and Bureau of Land Management (BLM). <p>Additional restrictions will include the following:</p> <ul style="list-style-type: none"> • During the construction phase of the project, SDG&E shall implement ongoing fire patrols. SDG&E shall maintain fire patrols during construction hours and for 1 hour after end of daily construction, and hotwork
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	<ul style="list-style-type: none"> • Fire Suppression Resource Inventory – In addition to 14 CCR 918.1(a), (b), and (c), SDG&E shall update in writing the 24-hour contact information and on-site fire suppression equipment, tools, and personnel list on a quarterly basis and provide it to the CAL FIRE, SDRFPD, and SDCFA. • During Red Flag Warning events, as issued daily by the National Weather Service in state responsibility areas (SRAs) and local responsibility areas (LRA), all non-essential, non-emergency construction and maintenance activities shall cease or be required to operate under Hot Work Procedure. • SDG&E and contractor personnel shall be informed of changes to the Red Flag event status and PAL as stipulated by CAL FIRE and CNF. • All construction crews and inspectors shall be provided with radio and/or cellular telephone access that is operational throughout the project area to allow for immediate reporting of fires. Communication pathways and equipment shall be tested and confirmed operational each day prior to initiating construction activities at each construction site. All fires shall be reported to the fire agencies with jurisdiction in the project area immediately upon ignition. • Each crew member shall be trained in fire prevention, initial attack firefighting, and fire reporting. Each member shall carry at all times a laminated card listing pertinent telephone numbers for reporting fires and defining immediate steps to take if a fire starts. Information on contact cards shall be updated and redistributed to all crewmembers as-needed, and outdated cards destroyed, prior to the initiation of construction activities on the day the information change goes into effect. • Each member of the construction crew shall be trained and equipped to extinguish small fires with hand-held fire extinguishers in order to prevent them from growing into more serious threats. Each crew member shall at all times be within 100 feet of a vehicle containing equipment necessary for fire suppression as outlined in the final Construction Fire Prevention/Protection Plan. <p>SDG&E will provide a draft copy of the Construction Fire Prevention/Protection Plan to the CAL FIRE, SDRFPD, and SDCFA for comment a minimum of 90 days prior to the start of any construction activities. The comments will be provided back to SDG&E and revisions to the plan will address each comment to the satisfaction of the CPUC. The final plan will be approved by the CPUC with input from CAL FIRE, SDRFPD, SDCFA, and BLM, as desired, prior to the initiation of construction activities and provided to SDG&E for implementation during all construction prior to the initiation of construction activities. All construction work on the ECO Substation Project shall follow the Construction Fire Prevention/Protection Plan guidelines and commitments.</p>
Location	At ECO Substation, access roads/work areas.
Monitoring/Reporting Action	CAL FIRE, Rural Fire Protection District, SDCFA, BLM, and CPUC will review SDG&E's Construction Fire Prevention/Protection Plan and ensure its implementation.
Effectiveness Criteria	Approval and implementation of the plan. Quarterly updates to agencies. Work stoppage during Red Flag Warnings and Very High PAL. Coordination with fire authority.
Responsible Agency	CAL FIRE, Rural Fire Protection District, SDCFA, BLM, CPUC.
Timing	Minimum 90 days prior to scheduled start of construction for draft of Construction Fire Prevention/Protection Plan. Minimum 30 days prior to scheduled start of construction for final plan. Plan in effect throughout construction.

Mitigation Measure	<p>FF-2: Revise the Wildland Fire Prevention and Fire Safety Electric Standard Practice Plan (2009)⁶ to Create the Wildland Fire Prevention and Fire Safety Electric Standard Practice Operational Maintenance Plan. The revised plan will address the ECO Substation Project and will be implemented during all operational maintenance work associated with the project for the life of the project. Important fire safety concepts that will be included in this document are as follows:</p> <ul style="list-style-type: none"> • Implement existing practices including Electric Standard Practice 113.1, Maintenance of existing Remote Automated Weather Stations and territory-wide weather system monitoring, adjusted system reclosing policies (patrols), replacement of wood poles with steel in priority areas, and additional measures as may be developed, participation in San Diego County FireSafe Council and other public outreach. • Guidance on where maintenance activities may occur (non-vegetated areas, cleared access roads, and work pads that are approved as part of the project design plans) Fuel modification buffers required by the Fire Protection Plan (FPP) • When vegetation work will occur (prior to any other work activity) • Timing of vegetation clearance work to reduce likelihood of ignition and or fire spread • Coordination procedures with fire authority • Integration of the project's Construction Fire Prevention/Protection Plan content • Personnel training and fire suppression equipment • Fire safety coordinator role as manager of fire prevention and protection procedures, coordinator with fire authority and educator • Communication protocols • Incorporation of CAL FIRE, San Diego Rural Fire Protection District (SDRFPD), and SDCFA reviewed and approved Response Plan mapping and assessment. • Other information as provided by CAL FIRE, SDRFPD, SDCFA, BLM, and CPUC <p>SDG&E will provide a draft copy of the Wildland Fire Prevention and Fire Safety Electric Standard Practice Operational; Maintenance Plan to CAL FIRE, SDRFPD, SDCFA, BLM, and CPUC for comment a minimum of 90 days prior to the start of any construction activities. The comments will be provided back to SDG&E and plan revisions will address each comment to the satisfaction of the CPUC. The final plan will be approved by the CPUC prior to energizing the project and provided to SDG&E for implementation during all operational maintenance activities.</p>
Location	At ECO Substation, access roads/work areas.
Monitoring/Reporting Action	CAL FIRE, Rural Fire Protection District, SDCFA, BLM, and USFS will review and provide comments. CPUC will approve SDG&E's revised Fire Plan for Electric Standard Practice. CPUC and BLM will verify adoption of plan.
Effectiveness Criteria	Approval and implementation of the plan. Quarterly updates to agencies. Work stoppage during Red Flag Warnings and Very High PAL. Ongoing coordination with Fire Authority.
Responsible Agency	CAL FIRE, Rural Fire Protection District, and SDCFA.
Timing	Review and approval of plan minimum 90 days prior to energizing the ECO Substation Project. Revision every 5 years thereafter.
Mitigation Measure	<p>FF-3: Provide Assistance to San Diego Rural Fire Protection District (SDRFPD) and San Diego County Fire Authority (SDCFA). Provide assistance to SDRFPD and SDCFA to improve the response and firefighting effectiveness near electrical substations, transmission lines, and aerial infrastructure based on project risk and fire protection needs. Assistance by SDG&E shall include providing funding for one SDCFA Fire Code Specialist II position to enforce existing fire code requirements, including but not limited to implementing required fuel</p>

	<p>management requirements (e.g., defensible space), in priority areas to be identified by the SDCFA for the life of the project. All fuel management activities shall be in accordance with CEQA Guidelines Section 15304 (j), which indicates that the minor land alternation activities will not have a significant effect on the environment, as the activities will not result in the taking of endangered, rare, or threatened plant or animal species or significant erosion and sedimentation of surface waters. In addition, SDG&E is to provide funding to allow SDCFA to employ up to four volunteer/reserve firefighters as part-time code inspectors on a stipend basis for up to 90 days per year for the life of the project. The funding for the SDCFA Fire Code Specialist II position and the four volunteer/reserve firefighters as part-time code inspectors will be provided through proportional contributions, to be determined by CPUC and BLM, from SDG&E (and the other applicants) to the SDCFA prior to construction.</p> <p>A fixed annual fire mitigation fee of approximately \$116,600 will be provided by SDG&E to SDRFPD for mitigation funding. The funding will be utilized to assist with the purchase and maintenance of a Type I engine with an aqueous film forming foam (AFF) apparatus with a deck gun to apply a heavy stream. In addition, the funding will be utilized to provide for a third volunteer stipend to staff the engine with firefighters and training for electrical firefighting for 10 personnel (2 per year on a 5-year rotation). The fire mitigation fee will be paid annually during the life of the project and terminated upon decommissioning of the substation and related facilities.</p>
Location	At ECO Substation Project site, access roadway/work areas.
Monitoring/Reporting Action	CPUC, SDRFPD, and SDCFA verify position(s) are filled.
Effectiveness Criteria	Hiring of position(s) complete.
Responsible Agency	SDRFPD/SDCFA/CPUC.
Timing	New position(s) in place at beginning of construction and through life of project.

Mitigation Measure	<p>FF-4: Customized Fire Protection Plan for Project. A draft Fire Protection Plan (FPP) will be submitted to CAL FIRE, SDRFPD, and SDCFA at least 90 days before the start of any construction activities. Comment on the draft FPP shall be provided to SDG&E and SDG&E shall resolve each comment in consultation with each responsible agency. The final FPP shall be approved by the CPUC prior to the initiation of construction activities. The FPP will include, at minimum, the following:</p> <ul style="list-style-type: none"> • San Diego County FPP Content Requirements (http://www.sdcounty.ca.gov/dplu/docs/Fire-Report-Format.pdf) • Rural Fire Protection District Content Requirements <ul style="list-style-type: none"> ○ Provisions for fire safety and prevention ○ Water supply ○ Fire suppression/detection systems – built-in detection system with notification ○ Secondary containment ○ Site security and access ○ Emergency shut-down provisions • Integration into plans prepared to satisfy Mitigation Measures FF-1 and FF-2 <p>The FPP will be incorporated into MM FF-1, the Construction Fire Prevention/Protection Plan, and MM FF-2, the Wildland Fire Prevention and Fire Safety Electric Standard Practice (2009)¹ Operational Maintenance Plan. The Customized Fire Protection Plan will incorporate clarifications and additional ECO Substation Project APMs described in Section B of this EIR/EIS.</p>
Location	Applicable to ECO Substation site, access roads, and work areas.
Monitoring/Reporting Action	CPUC and BLM verify FPP is prepared and SDG&E has adequately addressed comments from CAL FIRE Rural Fire Protection District, and SDCFA.
Effectiveness Criteria	FPP is created. FPP requirements are implemented project wide.
Responsible Agency	Rural Fire Protection District/SDCFA/CAL FIRE
Timing	Findings incorporated into Plans created to satisfy Mitigation Measures FF-1 and FF-2. Comments provided to SDG&E a minimum of 60 days prior to scheduled start of construction. Final FPP completed a minimum of 30 days prior to the scheduled start of construction. Plan applicable for life of project.
Mitigation Measure	<p>FF-6: Funding for FireSafe Council. Provide funding for Boulevard/Jacumba/La Posta FireSafe Council with a clarified focus of coordinating a Community Wildfire Protection Plan (CWPP) and Evacuation Plan. Funding for the Boulevard/Jacumba/La Posta FireSafe Council will enable this newly formed organization a means to proactively complete these plans, provisions for applying for grant funding, and ultimately, for implementing fuel reduction and evacuation plans. Funding will be a lump sum, one-time amount with SDG&E providing fair share of CWPP and Evacuation Plan preparation.</p>
Location	Funds to be allocated for hazard reduction projects within the nearest jurisdiction/FireSafe Council boundary with assets to be protected.
Monitoring/Reporting Action	County/Boulevard/Jacumba/La Posta FireSafe Council verifies project contributions.
Effectiveness Criteria	Funds are deposited. Community Wildfire Protection Plan is prepared and/or hazard reduction projects are initiated and completed.
Responsible Agency	Boulevard/Jacumba/La Posta FireSafe Council monitors SDG&E's fund contribution.

¹ http://www.cpuc.ca.gov/environment/info/dudek/ECOSUB/Attach%204_07-B%20Wildland%20Fire%20Prevention%20and%20Safety%20Practice.pdf

Timing	Prior to construction, one-time, lump sum
Mitigation Measure	<p>FF-7: Preparation of Disturbed Area Revegetation Plan. All areas disturbed during construction activities that will not be continuously included in the long-term maintenance access right-of-way (ROW) will be provided native plant restoration in order to prevent non-native, weedy plants from establishing. Disturbed areas that will be included in the long-term maintenance program will not be revegetated as any plants that establish in these areas will be removed on an ongoing (at least annual) basis.</p> <p>Mitigation Measure FF-7 corresponds with Mitigation Measure Bio-1d and is not a duplicative plan but will be implemented under the biological monitoring program. It directs that the temporary disturbance areas will be revegetated with native plants common to the area through direction detailed in a Habitat Restoration Plan. The Habitat Restoration Plan will be prepared to restore native habitat and to reduce the potential for non-native plant establishment. The restoration plan will incorporate a Noxious Weeds and Invasive Species Control Plan to assist in restoring the construction area to the prior vegetated state and lessen the possibility of establishment of non-native, flammable plant species. A copy of the Revegetation Plan will be provided to the CPUC and BLM.</p>
Location	All disturbed areas of ECO Substation, access roadway and work areas.
Monitoring/Reporting Action	CPUC and BLM to verify that restoration plan has been submitted and is implemented.
Effectiveness Criteria	Restoration plan will designate monitoring frequency and duration and success criteria.
Responsible Agency	CPUC/BLM.
Timing	Plan submitted to CPUC and BLM for review 90 days prior to energizing the substation and related facilities. Restoration will be initiated at earliest opportunity upon completion of soil-disturbing activities.

(END OF ATTACHMENT)

EXHIBIT

2

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

In the Matter of the Application of SAN DIEGO)
GAS & ELECTRIC COMPANY (U902 E) for a)
Permit to Construct Electrical Facilities with)
Voltages between 50 kV and 200 kV and New)
Substations with High Side Voltages Exceeding)
50 kV: The East County Substation Project)
_____)

Application 09-08-003
(Filed August 10, 2009)

OPENING BRIEF OF BACKCOUNTRY AGAINST DUMPS

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November 7, 2011

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SUMMARY OF RECOMMENDATIONS

Protestant and Party Backcountry Against Dumps (“BAD”) makes the following recommendations to Administrative Law Judge Yacknin and the California Public Utilities Commission (“CPUC”):

1. Declare that the Environmental Impact Report (“EIR”) for the East County Substation, Tule Wind and Energia Sierra Juarez Gen-Tie projects violates the California Environmental Quality Act;
2. Order the CPUC Energy Division to correct the deficiencies in the EIR and recirculate the document; and
3. Adopt a distributed generation alternative to the proposed projects.

I. INTRODUCTION

On September 14, 2011, the California Public Utilities Commission (“CPUC”) issued the Final Environmental Impact Report/Environmental Impact Statement (“FEIR”) for the East County (“ECO”) Substation/Tule Wind/Energia Sierra Juarez (“ESJ”) Gen-Tie projects (collectively, the “Project”). In her October 31, 2011 ruling, Administrative Law Judge Yacknin (1) admitted the FEIR – marked as Exhibit 11 – into the evidentiary record for the CPUC proceeding on San Diego Gas and Electric Company’s (“SDG&E’s”) application to construct the ECO Substation project, Application 09-08-003, and (2) set the schedule for briefing on the EIR’s compliance with the California Environmental Quality Act (“CEQA”), Public Resources Code (“PRC”) section 21000 *et seq.* Pursuant to Judge Yacknin’s October 31 ruling and the March 15, 2011 Assigned Commissioner’s Scoping Memo and Ruling setting the scope of issues for the ECO Substation proceeding, Protestant and Party Backcountry Against Dumps (“BAD”) hereby submits its Opening Brief.

As BAD discussed in its extensive comments on the Draft EIR (“DEIR”) for the Project,¹ the Project environmental review has been deficient from the outset. By failing to correct many of these inadequacies in the FEIR, the CPUC violated CEQA. The CPUC could avoid most of the Project’s impacts by adopting an alternative that focuses on developing non-fossil fuel distributed generation projects near demand centers in already-disturbed areas. The FEIR describes such an alternative, though it is erroneously dismissed as infeasible and incapable of meeting the Project objectives. BAD encourages the CPUC to adopt a distributed generation

¹ BAD’s DEIR comments (“BAD Comments”) and the seven exhibits thereto are included in volume 4 of the FEIR on pages 490 through 709.

alternative in place of the proposed Project, which is simply an unnecessary industrialization of pristine desert wilderness areas.

In addition, the CPUC further violated CEQA by failing to recirculate the FEIR despite its introduction of substantial new information revealing for the first time substantial new environmental impacts resulting from the Project.

II. THE FEIR VIOLATES CEQA

The “environmental impact report is the heart of CEQA and the environmental alarm bell whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.” *Sierra Club v. State Board of Forestry* (1994) 7 Cal.4th 1215, 1229 (internal quotations and citations omitted). To ensure that this purpose is effectuated, EIRs must comply with the letter of CEQA. Furthermore, there must be “substantial evidence to support the [EIRs’] factual determinations.” *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova (“Vineyard”)* (2007) 40 Cal.4th 412, 427. “Only by requiring the [agency] to fully comply with the letter of the law can a subversion of the important public purposes of CEQA be avoided.” *Rural Landowners Assn. v. City Council of Lodi* (1983) 43 Cal.App.3d 1012, 1022. Here, the CPUC has failed to proceed in the manner prescribed by CEQA. In addition, many of the factual assertions in the FEIR are not supported by the evidence.

A. The FEIR’s Project Description Is Inadequate

CEQA requires that agencies include in their EIRs an *accurate* “description of the project’s technical, economic, and environmental characteristics.” 14 Cal. Code Regs. (“Guidelines”) §15124(c). The CPUC failed to do so here.

In its description of the ESJ project, the FEIR, like the DEIR before it, asserts that “[o]nly renewable energy would be transmitted via the gen-tie line.” FEIR at ES-11. As BAD noted in its comments on the DEIR, “this statement is entirely unsupported by evidence.” BAD Comments at 2. The statement remains unsupported in the FEIR. Indeed, the CPUC fails to *even mention* the statement in its responses to BAD’s comments, in violation of CEQA Guidelines section 15088(c). FEIR at 2.2-3, D33-2. To the contrary, the responses to comments confirm that the ESJ gen-tie line could transmit *non*-renewable energy. FEIR at 2.2.-3 (“ECO Substation and consequently ESJ Gen-Tie are within the CASIO [sic] authority, and therefore not subject to [the CEC] rule” that “out of state generation must comply with state environmental regulations in order to qualify as an eligible renewable resource”).

By erroneously stating that the ESJ gen-tie line, and thus the ECO Substation, would *only* transmit renewable energy, the FEIR overstates the environmental “benefits” of the Project and misleads the public and the decisionmakers. Without a guarantee that the power on the gen-tie line be limited to renewable energy it is likely that the ESJ project and the ECO and Boulevard substations would cause more fossil fuel-based generating facilities to be built in Mexico. As BAD explained in its DEIR comments:

Notably, Sempra’s Bajanorte Gasducto liquified natural gas (“LNG”) line and a newly constructed water line run through Sempra’s lease land directly south of the proposed location for the ECO Substation. With the construction of the ESJ gen-tie line, Sempra will have all the necessary ingredients for a new gas-fired power plant on the Mexican side of the international border: gas, water, and transmission. Sempra has previously indicated that LNG will serve as its primary fuel for decades to come and has invested billions in its LNG infrastructure in Baja, including the construction of the Energia Costa Azul LNG terminal near Ensenada, Mexico.

BAD Comments at 17.

The FEIR's misrepresentation as to the source of the energy to be transmitted via the ESJ gen-tie line violates CEQA's requirement that EIRs contain an accurate project description. Guidelines §15124. Moreover, it is anathema to CEQA's most central purpose: "to inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities." *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1996) 42 Cal.App.4th 608, 614.

B. The FEIR Improperly Dismisses Feasible and Less Impactful Alternatives

CEQA requires agencies to consider a "reasonable range of alternatives that will foster informed decisionmaking and public participation." Guidelines §15126.6(a). The "discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, *even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.*" *Id.* §15126.6(b) (emphasis added). It is imperative that the "EIR . . . include sufficient information about each alternative to allow *meaningful evaluation, analysis, and comparison* with the proposed project." *Id.* §15126.6(d) (emphasis added). A project *cannot* be approved if its significant impacts can be feasibly reduced to insignificance through project alternatives or mitigation measures. PRC §§21002, 21081.

Agencies can eliminate alternatives from detailed consideration in an EIR if they are infeasible, fail to meet "*most*" of the basic project objectives or do not avoid significant environmental impacts. *Id.* §15126.6(c) (emphasis added). However, the EIR must discuss the selection and rejection of alternatives "in a manner to foster meaningful public participation and

informed decisionmaking.” *Id.* §15126.6(f). An agency’s rejection of an alternative as “infeasible” or otherwise “unworthy of more in-depth consideration” must be supported by “substantial evidence.” *Center for Biological Diversity v. County of San Bernardino* (“*CBD*”) (2010) 185 Cal.App.4th 866, 885.

Here, the CPUC unacceptably eliminated feasible – and less environmentally damaging – alternatives from careful review. Most notably, the CPUC dismissed the ECO System Alternative 6 and the Distributed Generation alternatives without providing sufficient evidence to support its decision. Indeed, the CPUC dismissed the two alternatives despite substantial evidence showing that the alternatives *are feasible* and otherwise beneficial. As elucidated in BAD’s DEIR comments and the Declaration of Bill Powers (Exhibit 2 to BAD’s comments), both of these alternatives are commercially and technically feasible. Moreover, they would both meet the Project objectives of increasing renewable energy development, meeting state Renewables Portfolio Standards and federal renewable energy mandates, and improving the reliability of power delivery to Boulevard, Jacumba and other nearby communities. FEIR at A-10, D33-3.

1. The ECO System Alternative 6

The ECO System Alternative 6 was proposed as an alternative to the ECO Substation and ESJ project. The ECO System Alternative 6 is described in the FEIR as follows:

Use existing Comision Federal de Electricidad (CFE) 230 kV line located in northern Mexico and Path 45 to transmit ESJ Energy and upgrade East County 69 kV substations combined with upgrading existing East County 69 kV substation(s) and lines to accommodate local wind development combined with microgrid reinforcement of local transmission infrastructure to meet load requirements from rooftop solar or other local, small-scale resources.

FEIR at C-13. The alternative would also “include development of rooftop solar and other local, small-scale energy sources” to improve the reliability of power delivery in the Boulevard and Jacumba area.

Just like the DEIR, the FEIR dismisses this alternative because (1) there is not enough capacity on the CFE 230 kV lines and Path 45 to “interconnect all of the ESJ Wind Project” in the La Rumorosa area of Mexico, or “all the region’s planned renewable generation;” (2) the alternative “would not meet reliability objectives;” (3) upgrades to the CFE and Path 45 systems “may pose substantial regulatory and legal constraints to achieving delivery of renewable energy;” and (4) the “alternative may not meet environmental criteria because up to 100 miles of reconductering or rebuilding projects would be required to integrate planned renewable generation in the Boulevard area.” *Id.* The FEIR is wrong; the ECO System Alternative 6 is feasible and would meet the CPUC’s Project objectives, as amply described in BAD’s DEIR comments and the accompanying Declaration of Bill Powers, and reiterated below. BAD Comments at 5-6, Exhibit 2 ¶¶3-7, 18.

a. There Is Ample Capacity on the CFE 230 kV Lines and Path 45

There is ample capacity in the CFE 230 kV system and Path 45 to transmit the entire planned generation of the ESJ Wind Project. The current unused import capacity of Path 45 is 800 MW. *See* FEIR at C-13; BAD Comments at Exhibit 2 ¶¶3-6. However, the available capacity could be doubled if the lines were reconductered with composite conductors. *See* BAD Comments at 5 n.3. With a capacity of 1,600 MW, the “planned generation of 1,200 MW from the ESJ Wind Project” would be easily accommodated. FEIR at C-13. As for the other renewable generation planned in the region, some of it could be accommodated via upgrades to

existing East County substations. FEIR at C-13, 49. And local distributed generation could obviate the need for any additional industrial-scale renewable generation facilities in the region. See BAD Comments at Exhibit 2 ¶¶8-17.

In the FEIR response to comments, the CPUC reasserts that using the CFE 230 kV system is infeasible because “it would not be able to accommodate planned generation of 1,200 MW from the ESJ Gen-Tie Wind Project without significant upgrading.” FEIR at D33-6. The CPUC makes new claims to support its conclusion, but none of them constitute the required substantial evidence and are insufficient to overcome BAD’s showing that using Path 45 *is* feasible, as shown below.

First the CPUC contends, based on a vague “indicat[ion]” by CFE, that “CFE’s La Rosita (ROA) to Tijuana (TJ) 230 kV system is at capacity.” FEIR at D33-6. But in the very same paragraph, the CPUC refutes its own assertion, stating that “it has *not* been possible to confirm available capacity on the 230 kV CFE line.” *Id.* (emphasis added). Furthermore, the CPUC provides no evidence to counter the Milbank, Tweed, Hadley & McCloy report – cited in Bill Powers’ Declaration (BAD Comments at Exhibit 2 ¶4) – that estimates there remain at least 800 MW of *unused* capacity on Path 45.

Second, the CPUC asserts that using the CFE 230 kV system would somehow be infeasible because it would “require upgrades to the CFE portion of the system” that would necessitate international agreements and be both costly and “at the sole discretion of the CFE.” FEIR at D33-6 (quote), 7 (additional discussion). But as the CPUC readily admits, it has *not studied* or even *attempted* to quantify these putative barriers. *Id.* While using Path 45 would require payment of a wheeling fee to CFE as well as some upgrade expenses, the CPUC has

provided no evidence that those costs would be greater than constructing the ECO Substation and ESJ project. Furthermore, the CPUC studiously ignores the evidence that reconductering lines is much cheaper than building wholly new transmission lines to achieve the same capacity increase. *See* BAD Comments at 5 n.3. Without more specific information on the putative barriers to using the CFE 230 kV system, CPUC has not provided substantial evidence to support its determination that it is infeasible.

b. The ECO System Alternative 6 Would Meet Reliability Objectives

The ECO System Alternative 6 would meet the reliability objectives for the Boulevard and Jacumba area. As noted in the FEIR itself, upgrading the existing East County substations would improve reliability, as would increased distributed generation in the area. FEIR at C-49, 49. Further, as Bill Powers testified, the “reliability of the combined Boulevard/Jacumba area load could be completely assured with a 3 MW peak gas turbine at a cost of less than \$4 million.” BAD Comments at Exhibit 2 ¶7.

Disregarding its own description of Alternative 6, which admits that it would *improve* reliability, the CPUC asserts in its FEIR response to comments that “[t]his alternative ignores the issue of reliability and continuity of service during times when resources to power local rooftop photovoltaic (PV) systems are unavailable.” FEIR at D33-7. Based on this false premise, the FEIR erroneously concludes that Alternative 6 would not meet Project objectives. *Id.* This statement is unsubstantiated and does not constitute substantial evidence that the alternative would not meet Project objectives. Indeed, the relevant evidence shows that the alternative *would* meet Project reliability objectives, as shown below.

First, as the CPUC admits in the FEIR, Alternative 6 would improve reliability through “development of rooftop solar and other local, small-scale energy sources as well as reinforcement and upgrading of the local energy delivery system.” FEIR at C-49. Thus, Alternative 6’s reliability improvements are not tied solely to local PV systems. The alternative also includes the development of *other* local supplemental power sources such as a 3 MW peaking gas turbine to provide power at night or other times when PV systems are unavailable. As noted, “reliability of the combined Boulevard/Jacumba area load could be completely assured with a 3 MW peak gas turbine.” BAD Comments at Exhibit 2 ¶7. Even the CPUC admits that a peaking gas turbine “could reduce the outage time.” FEIR at D33-8.

Second, the CPUC’s goal is to “[i]mprove the reliability of power delivery to the communities of Boulevard, Jacumba, and surrounding communities.” FEIR at A-10 (emphasis added). The objective is not to “‘assure’ reliability,” as the CPUC implies in its response to comments. FEIR at D33-8. And as the CPUC itself admits in the FEIR, Alternative 6 would *improve* reliability by upgrading the existing East County substations and developing new local, small-scale energy sources. FEIR at C-49.

For these reasons, Alternative 6 would meet the Project’s reliability objectives.

c. The Legal and Regulatory Barriers to Implementation of the ECO System Alternative 6 Are Significantly Overblown in the FEIR

The CPUC suggests in both the body of the FEIR and the FEIR response to comments that the ECO System Alternative 6 “may pose substantial regulatory and legal constraints to achieving delivery of renewable energy,” thus rendering the alternative infeasible. FEIR at C-13 (quote), 49; D33-6, 7. But, as discussed, the CPUC’s assertion is based on no more than

speculation and is not supported by substantial evidence. Moreover, as Bill Powers testified, “Sempra is clearly comfortable operating in the Baja California legal and regulatory environment,” and “[i]t is not credible for CPUC and BLM to claim in the DEIR that there are sufficient capacity, legal, or regulatory impediments to exporting wind power from Baja California over Path 45 to make its use infeasible.” BAD Comments at Exhibit 2 ¶¶6 (quote), 3-5.

d. The CPUC Provides Absolutely No Evidence to Show that the ECO System Alternative 6 Would Not Meet Environmental Criteria

The CPUC contends that the ECO System Alternative 6 “may not meet environmental criteria because up to 100 miles of reconductering or rebuilding projects would be required to integrate planned renewable generation in the Boulevard area.” FEIR at C-13, 49; D33-7. Yet the CPUC provides absolutely *no evidentiary support* for this bare conclusion. Furthermore, it is unclear how the upgrading and reusing of existing infrastructure would be more environmentally damaging than the construction of new gen-tie lines, transmission lines, substations and other associated facilities.

In sum, the ECO System Alternative 6 is feasible and would meet the Project objectives. The CPUC was thus required to fully examine this alternative, but instead dismissed it as infeasible and unable to fulfill Project objectives. By failing to provide substantial evidence to support its dismissal of the alternative, the CPUC violated CEQA and rendered the FEIR inadequate. *CBD*, 185 Cal.App.4th at 884-85.

2. The Distributed Generation Alternative

The FEIR describes the distributed generation alternative as follows:

Under this alternative, the ECO Substation, Tule Wind and ESJ Gen-Tie projects would not be built. Instead, distributed generation including but not limited to residential and commercial rooftop solar panels, biofuels, hydrogen fuel cells, and other renewable distributed energy sources would be installed in place of the Proposed PROJECT.

FEIR at C-55. Just like the DEIR, the FEIR dismisses the distributed generation alternative on the grounds that it (1) would not meet renewable energy goals by 2020, (2) would be infeasible from a technical and commercial standpoint within the 2010-2020 time horizon, and (3) would only partially solve reliability issues to the Boulevard and Jacumba communities. FEIR at C-55 to 58. The FEIR misstates the record. Distributed generation is feasible, cost-effective and would meet the CPUC's Project objectives.

a. The Distributed Generation Alternative Could Meet Renewable Energy Goals by 2020

As Bill Powers testified, "800-1,000 MW of distributed [photovoltaic ("PV") solar generation] will be installed in SDG&E territory [by 2020] if the current 80-100 MW per year distributed PV installation rate is maintained." BAD Comments at Exhibit 2 ¶¶10 (quote), 8-9. Furthermore, there is significantly more distributed generation potential with other sources, such as combined heat and power plants, of which there are "nearly 400 MW[s] of cost-effective . . . potential in SDG&E's service territory, according to a 2005 study. *Id.* at ¶15. Combined, these and other distributed generation sources could meet "California's renewable portfolio standard (RPS) under Senate Bill (SB) X1 2, which established a renewable energy target of 33% of total electricity sold to retail customers by 2020." FEIR at D33-3.

In its FEIR response to comments, the CPUC asserts that the "combined effect of distributed generation programs gives a maximum foreseeable contribution of up to [only] 344

MWs.” FEIR at 2.3-4. Consequently, continues the CPUC, “under current regulatory conditions a distributed generation technology alternative falls short of the 635.5 MW of analyzed wind capacity and the potential for an additional 1140 MW of wind capacity offered by the project.” *Id.* Therefore, the agency contends, “the implementation of such an alternative does not fulfill the objectives of the Proposed PROJECT.” *Id.* The CPUC is mistaken as to both the facts and the law.

First, the 344 MWs of distributed generation (including 216.7 MW of distributed solar generation) listed by the CPUC constitute not just “foreseeable” generation, but nearly *assured* generation. *See* FEIR at 2.3-5, 6; BAD Comments at Exhibit 2 ¶¶8-10. As Bill Powers’ testimony has made clear, beyond that relatively assured generation, it is *foreseeable* that another 583.3 to 783.3 MW of distributed solar PV generation *alone* will be developed by 2020. BAD Comments at Exhibit 2 ¶¶8-10. And this does not even account for the foreseeable development of up to 400 MW of combined heat and power generation by 2020. *Id.* at ¶¶13-17.

Second, the CPUC misstates the Project objective as developing between 635.5 and 1140 MW of renewable energy generation capacity by 2020. FEIR at 2.3-4. The actual objective is to “[m]eet California’s [RPS]” by 2020. *Id.* at D33-3. As discussed, the distributed generation alternative would meet that objective.

Third, in dismissing Alternative 6 the CPUC utilizes the wrong legal standard. Agencies may only dismiss alternatives from detailed consideration in an EIR if they fail to “meet *most* of the basic project objectives.” Guidelines §15126.6(c)(i). To qualify for detailed consideration, an alternative need not fulfill *all* “the objectives of the PROPOSED Project,” as the CPUC implies. FEIR at 2.3-4. Thus, the CPUC dismissed the distributed generation alternative under

an improper standard. And in any case, the distributed generation *does* meet *all* the CPUC’s Project objectives, *especially* achieving renewable energy goals. As the CPUC admits, the distributed generation alternative “would contribute directly to meeting state and federal renewable energy resource goals.” FEIR at C-55.

b. The Distributed Generation Alternative Is Cost-Effective

The CPUC contends in its FEIR that “rooftop solar” is “infeasible from a technical and commercial perspective.” FEIR at C-57. Yet as Bill Powers’ testimony demonstrated, that is simply not true. His testimony proved that distributed generation sources – at least solar photovoltaics and combined heat and power plants – are actually *more* cost effective than most other generation sources, including those that the Project would tap. BAD Comments at Exhibit 2 ¶¶11-17. Indeed, even “SDG&E’s parent company Sempra Energy identifies solar PV as less costly than other forms of solar power.” *Id.* at ¶12. As former CPUC Commissioner John Bohn observed, “these projects can get built quickly and without the need for expensive new transmission lines.” *Id.* (internal quotations and citation omitted). Furthermore, distributed generation reduces the vulnerability of SDG&E’s electrical grid to fires and other natural disasters. *Id.* at ¶¶11, 14. Solar PV and other distributed generation sources are feasible, technically and commercially. The “[a]s yet undefined technical hurdles associated with high levels of PV development” asserted by the CPUC are simply too speculative to support its finding of distributed generation infeasibility. FEIR at C-57.

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c. The Distributed Generation Alternative Would Improve Reliability in the Boulevard/Jacumba Area

One of the reasons given by the CPUC for dismissing the distributed generation alternative is that it would “only partially solve[] the issue of reliability in the Boulevard and Jacumba communities.” FEIR at C-57. But this is not a sufficient ground for eliminating the alternative from detailed consideration. While distributed generation might not *assure* reliability in the Boulevard/Jacumba area, it would “*partially solve[]* the issue” and thus help achieve the CPUC’s Project objective of improving power delivery reliability in that region. *Id.* The CPUC cannot dismiss alternatives for *meeting* its objectives. It can only remove from detailed evaluation alternatives that *fail* to “meet most of the basic project objectives.” Guidelines §15126.6(c)(i).

In sum, the distributed generation alternative is feasible and would meet the Project objectives. The CPUC was thus required to fully examine this alternative, but instead dismissed it as infeasible and unable to fulfill Project objectives. By failing to provide substantial evidence to support its dismissal of the alternative, the CPUC violated CEQA and rendered the FEIR inadequate. *CBD*, 185 Cal.App.4th at 884-85.

C. The FEIR’s Environmental Impact Analysis Is Deficient

An EIR must provide a discussion of the significant environmental impacts of the proposed project, including both direct and indirect impacts. Guidelines §§15126(a), 15126.2(a). A “significant effect” occurs when a project causes a “substantial, or *potentially substantial*, adverse change in any of the physical conditions within the area affected by the project.” Guidelines §15382 (emphasis added). “An EIR should be prepared with a sufficient degree of

analysis to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences.” Guidelines §15151; *Watsonville Pilots Association v. City of Watsonville* (2010) 183 Cal.App.4th 1059, 1080. Further, a lead agency must “use its best efforts to find out and disclose all that it reasonably can,” to demonstrate it has fully “considered the environmental consequences of [its] action.” Guidelines §15144; *Vineyard*, 40 Cal.4th at 428; *Berkeley Keep Jets Over the Bay Commission v. Board of Port Commissioners* (2001) 91 Cal.App.4th 1344, 1355-56. The EIR’s statements must also be supported by substantial evidence. *Laurel Heights Improvement Association v. Regents of the University of California* (“*Laurel Heights I*”) (1988) 47 Cal.3d 376, 407.

Where, prior to EIR certification but after the final public comment period, an agency adds new information to the EIR it must recirculate the document for additional public review if the information discloses: (1) a “new substantial environmental impact resulting from the project or from a new mitigation measure proposed to be implemented,” (2) a “substantial increase in the severity of an environmental impact unless mitigation measures are adopted that reduce the impact to a level of insignificance,” or (3) that “the draft EIR was so fundamentally and basically inadequate and conclusory in nature that public comment on the draft was in effect meaningless.” *Laurel Heights Improvement Association v. Regents of the University of California* (“*Laurel Heights II*”) (1993) 6 Cal.4th 1112, 1130 (internal citations omitted); PRC §21166; Guidelines §§15088.5, 15162.

Here, the FEIR fails to provide a fair and complete analysis supported by substantial evidence of the Project’s significant environmental impacts. Furthermore, despite the

inadequacy of the DEIR and the addition of significant new information to the FEIR, the CPUC failed to recirculate the document as required by CEQA.

1. Hydrologic Impacts

Under CEQA, an EIR must “demonstrate a reasonable likelihood that water will be available for the project from an identified source.” *Vineyard*, 40 Cal.4th at 446. “CEQA’s demand for meaningful information ‘is not satisfied by simply stating information will be provided in the future.’” *Id.* at 431 (quoting *Santa Clarita Organization for Planning the Environment v. County of Los Angeles* (2003) 106 Cal.App.4th 715, 723). The identified water sources for a land use project and the impacts of using them “are not the type of information that can be deferred for future analysis.” *Id.* The identification and analysis of the water supplies needed for a project prior to its approval are particularly important in arid areas where water supplies are limited, such as the dry desert region where the ECO Substation, Tule Wind and ESJ projects would be located. Nonetheless, the FEIR here fails to demonstrate with reasonable certainty that water will be available for the Project, violating CEQA.

This deficiency is most pronounced with respect to the ECO Substation project. The only somewhat assured source of water identified for the ECO Substation is the Sweetwater Authority’s “[c]onfirmation” that it has “sufficient water capacity to provide 25-million gallons of water to [the project] during construction.” FEIR at D.12-26. However, this is *5 million gallons less* than the identified water demand during construction. *Id.* Furthermore, the FEIR says nothing about the ECO Substation’s operational water demands or how they would be met, except that the “insulators” on the Southwest Powerlink loop-in structures would need to be washed with an undefined amount of water. *Id.* at B-39. The FEIR also fails to identify a

reasonably assured water source for the ESJ project, noting that if the Jacumba Community Services District does not provide the requisite water a well could be sunk instead, but *failing* to discuss the *feasibility* of doing so. *Id.* at B-98.

Instead of fully analyzing the Project’s water supplies, the FEIR merely includes a mitigation measure providing that “[p]rior to construction, the applicant will prepare comprehensive documentation that identifies one or more confirmed, reliable water sources that when combined meet the project’s full water supply *construction* needs.” FEIR at D.12-27 (emphasis added). This is entirely inadequate – water supplies must be identified *now* for both construction *and operational* demand from the ECO Substation, Tule Wind and ESJ projects. The identification and analysis of water supplies for the Project *cannot* be “deferred.” *Vineyard*, 40 Cal.4th at 431. By failing to “demonstrate a reasonable likelihood that water will be available for the project from an identified source,” the CPUC violated CEQA and rendered the FEIR inadequate. *Id.* at 446.

2. Public Health Impacts – Dirty Electricity

As BAD noted in its DEIR comments, the DEIR contains no analysis of dirty electricity – or stray voltage – and its potentially significant health impacts, which BAD described. BAD Comments at 12, Exhibit 5. Electrical pollution expert David Colling testified that “dirty electricity refers to the electromagnetic energy that flows along a conductor and deviates from a pure 60-Hz sine wave.” *Id.* at Exhibit 5, p. 1. Mr. Colling has tested for electrical pollution at multiple wind farms and substations and has found that “[w]ind turbines can produce significant electrical pollution in the form of dirty electricity. Additionally, if not adequately filtered, dirty electricity can be propagated through the substations and onto transmission and distribution

lines.” *Id.* at Exhibit 5, p. 8. As Mr. Colling has discovered, dirty electricity can travel significant distances both along power lines and through the ground, commonly impacting people and structures for more than 0.5 miles from the source (*e.g.*, a wind turbine or substation). *Id.* at Exhibit 5, p. 3.

The impacts of dirty electricity can be severe, with recent studies linking it to an increase in ailments such as diabetes, fibromyalgia, chronic fatigue syndrome and attention deficit disorder, among others. BAD Comments at 12. Anecdotal evidence, such as the horrific stories recounted by Paul Thompson in his comments on the DEIR, also bears out the negative effects of dirty electricity. *Id.*

In response to BAD’s and other comments on dirty electricity, the CPUC admits, quoting a data request response from Iberdrola Renewables (the Tule Wind project proponent), that “[s]tray voltage could occur [from the Tule Wind project] if the electrical equipment is not maintained properly” and “[i]nduced current or stray voltage has the potential for adverse health effects if not properly grounded.” FEIR at 2.8-9 (internal quotations and citation omitted). Nonetheless, the FEIR omits any detailed analysis of this potentially substantial adverse impact as required by CEQA. Guidelines §§15126(a), 15126.2(a), 15151.

The FEIR implies that the Project’s production of dirty electricity and its attendant impacts need not be analyzed in depth because Iberdrola Renewables will “confirm that [stray voltage will be] properly grounded.” FEIR at 2.8-9 (internal quotations and citation omitted). But grounding alone does not eliminate dirty electricity. To the contrary, grounding is a medium by which dirty electricity may be introduced into homes, schools, and other vulnerable uses. BAD Comments at Exhibit 5, pp. 2-5. Without acknowledgment and analysis of grounding as a

means of *exposing* human populations to – rather than protecting them from – dirty electricity, these conclusory statements made by the Tule Wind project proponent defy CEQA’s requirements. They in no way constitute the type of substantial evidence with which CEQA requires agencies to support their factual determinations. *Laurel Heights I*, 47 Cal.3d at 407. Furthermore, the statements only apply to the Tule Wind project in any case, and have no bearing on the dirty electricity impacts of the ECO Substation and ESJ project. Without more evidentiary support and analysis, the FEIR’s implied dismissal of the Project’s dirty electricity impacts as insignificant violates CEQA.

Because dirty electricity is a potentially substantial Project impact, it must be fully analyzed in the EIR. Guidelines §§15126(a), 15126.2(a), 15151. And because the FEIR discloses for the first time this “new substantial environmental impact resulting from the project,” the CPUC must recirculate the document for additional public review. *Laurel Heights II*, 6 Cal.4th at 1130. By failing to do either, the CPUC violated CEQA and rendered the FEIR inadequate.

3. Impacts to Avian Species

The FEIR, like the DEIR, fails to adequately analyze the Project’s noise impacts on birds. As FEIR section D.8 discusses, the Project’s construction noise levels would be very high. For example, noise levels will reach 80 dBA at a distance of 50 feet from the ECO Substation construction equipment and up to 95 dBA at a distance of 200 feet from various construction activities for the ECO Substation Southwest Powerlink Loop-in. FEIR at D.8-17, 18. In addition, the Project’s operational noise levels could approach 60 dBA at close distances and

during storms. FEIR at D.8-32 to 36. These noise levels present a potentially substantial adverse impact for avian species in the area. BAD Comments at 14-15.

As BAD thoroughly explained in its DEIR comments, the threshold for noise significance is substantially lower for some sensitive avian species than the noise levels the Project will likely produce. Particularly sensitive species in – or potentially in – the Project area include the horned lark, loggerhead shrike, least Bell’s vireo and Southwestern willow flycatcher. FEIR at Appendix 1-37 to 39, 42, 43. According to expert testimony from Dr. Travis Longcore, discussed in detail in BAD’s DEIR comments, the threshold for significant negative impacts on bird species similar to the birds just listed is much lower than 60 dBA. BAD Comments at 14. “From the published literature,” Dr. Longcore concludes that “a reasonable threshold based on similar species for least Bell’s vireo and southwestern willow flycatcher would be 40 dB(A) or below.” BAD Comments at Exhibit 6 p. 12. Dr. Longcore notes that empirical data from California “indicat[es] with certainty that territory occupancy is reduced by sound levels in the 50 – 60 dB(A) range” for the southwestern willow flycatcher (*id.* at Exhibit 6 p. 13), which is similarly susceptible to noise impacts as the California horned lark and loggerhead shrike since all three species are “small songbirds that rely on hearing songs to attract mates and defend territories.” *Id.* at 12. Thus, the Project is likely to cause significant noise impacts to sensitive and special-status bird species.

Despite the strong evidence of this significant impact, the FEIR, like the DEIR, contains *no discussion* of the impact. Instead, the FEIR merely notes that “indirect loss of” species such as the southwestern willow flycatcher “from noise and increased human presence” would “be significant” under CEQA, but “mitigated to a level that is considered less than significant.”

FEIR at D.2-143. These vague statements provide no information *whatsoever* as to how and in what ways the Project noise would impact sensitive and special-status birds, how those impacts could be mitigated or avoided, or whether the proposed mitigation measures would in fact reduce the impacts. In no way do these statements constitute the high “degree of analysis” that CEQA requires in an EIR “to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences.” Guidelines §15151; *Watsonville Pilots Association*, 183 Cal.App.4th at 1080. Therefore the FEIR violates CEQA.

Furthermore, the mitigation measure cited by the CPUC as mitigating the Project’s noise impacts on birds, BIO-7j (FEIR at D.2-148 to 150), pertains specifically to *nesting* birds, with the goal of “avoid[ing] the potential for project-related nest abandonment and failure of fledging, and minimiz[ing] any disturbance to nesting behavior.” FEIR at D.2-150. Neither measure BIO-7j nor any other mitigation measure addresses the impact of noise on *other* avian activities, such as masking the birds’ songs and thereby reducing reproductive or foraging success. BAD Comments at Exhibit 6, p. 11. The FEIR therefore lacks substantial evidence to support its determination that the Project’s noise impacts on birds will be reduced to an insignificant level. This too violates CEQA. *Laurel Heights I*, 47 Cal.3d 3 at 407.

III. CONCLUSION

For the foregoing reasons, the FEIR for the ECO Substation/Tule Wind/ESJ Gen-Tie projects violates CEQA. The CPUC must correct and recirculate the Project EIR. Further, to substantially reduce the Project’s impacts, the CPUC should provide a detailed analysis of the distributed generation alternative. After providing this required but omitted analysis, the CPUC

should adopt this alternative because it feasibly attains most of the Project's basic objectives at far lower environmental cost.

Dated: November 7, 2011

Respectfully submitted,

/s/ Stephan C. Volker

STEPHAN C. VOLKER

Attorney for Protestant and Party

BACKCOUNTRY AGAINST DUMPS

EXHIBIT

3

**SAN DIEGO GAS & ELECTRIC COMPANY
EAST COUNTY SUBSTATION PROJECT
AMENDED CONSTRUCTION WATER SUPPLY PLAN**

REVISED SEPTEMBER 30, 2013

PREPARED BY:



PREPARED FOR:



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- Attachment A: Service Confirmation Letter, City of San Diego
- Attachment B: Updated Service Confirmation Letter, Jacumba Community Service District
Administrative Code
- Attachment C: Service Confirmation Letter, Live Oak Springs Water Company
- Attachment D: Domestic Water Supply Permit, California Department of Health Services
- Attachment E: Withdrawal of Major Use Permit Application, County of San Diego
- Attachment F: Environmental Navigation Services Inc. Report

1 – INTRODUCTION

This Construction Water Supply Plan (Plan) describes how San Diego Gas & Electric Company (SDG&E) and its contractors will ensure the availability of one or more confirmed and reliable water sources that, when combined, meet the full water supply needs for construction of the East County (ECO) Substation Project (Project). The Project involves the construction of a new 500/230/138 kilovolt (kV) ECO Substation, rebuild of the Boulevard Substation in a new location, and construction of an approximately 14-mile-long 138 kV transmission line, consisting of overhead and underground segments in southeastern San Diego County.

This Plan was prepared in accordance with Mitigation Measure (MM) HYD-3 of the Mitigation Monitoring, Compliance, and Reporting Program for the Project, which includes a requirement to submit documentation that identifies one or more reliable water sources that, when combined, will meet the Project's full water supply needs during construction.

2 – OBJECTIVES

The purpose of this Plan is to provide a narrative description of how MM HYD-3 is met, including the attachment of separate documents fulfilling the documentation requirement of the MM. The construction water supply sources presented in this Plan accomplish the following objectives:

- Provide a reliable source of construction water to be supplied at a rate required to meet the Project schedule objectives
- Provide documentation from one or more water/utility districts indicating the total amount of water to be provided and the time frame that the water will be made available to support the Project
- Provide documentation from one or more groundwater sources demonstrating SDG&E's ability to legally use water from the source and a study discussing the required elements of MM HYD-3

3 – MITIGATION MEASURE

The full text of MM HYD-3 is provided in the following paragraphs:

HYD-3: Identification of sufficient water supply

Prior to construction SDG&E will prepare comprehensive documentation that identifies one or more confirmed, reliable water sources that when combined meet the project's full water supply construction needs. Documentation will consist of the following:

Preparation of a Groundwater Study. For well water that is to be used, the applicant will commission a groundwater study by a qualified hydrogeologist to assess the existing condition of the underlying groundwater/aquifer and all existing wells (with owner's permission) in the vicinity of proposed well location/water sources. The groundwater study

will evaluate aquifer properties and aquifer storage. The groundwater study will estimate short and long-term well water supplies from each well proposed to be used, and documentation indicating that each well is capable of producing the total amount of water to be supplied for construction from each well. The groundwater study will estimate short- and long-term impacts of the use of the well(s) on the local groundwater production (short-term extraction for construction water and ongoing O&M water), on all project wells, and on other wells in the project area. The groundwater study will include an assessment of the potential for subsidence brought on by project-related water use in the area. The applicant will provide demonstration of compliance with all applicable laws and regulations and will obtain a County of San Diego Major Use Permit for use of any proposed well within the County's jurisdiction prior to construction.

Documentation of Purchased Water Source(s). For water that is to be purchased from one or more water/utility district(s), the applicant shall provide written documentation from such district(s) indicating the total amount of water to be provided and the time frame that the water will be made available to the project. The Sweetwater Authority has provided written confirmation of water availability to support the project. Total confirmed water supplies from the combination of above documented sources shall equal the total gallons of water needed through construction of the project.

4 – CONSTRUCTION WATER SUPPLY NEEDS

The Project requires construction water for the following activities:

- Dust control
 - Substation pads and access roads
 - Transmission line access roads and tower pads
 - Construction yards
 - Pull sites, guard structure locations and other Project components
- Compaction of earth fill
 - Substation pads and access roads
 - Transmission line access roads and tower pads
 - Backfill of underground transmission line trenches
- Concrete pouring and washout
 - Underground transmission line duct banks
- Other miscellaneous activities
 - Restoration of Project sites and temporary irrigation equipment
 - Equipment/vehicle washing for weed control

The total estimated quantity of construction water required to construct the Project is approximately 90 million gallons over the 16-month construction period. Construction water will be required at a relatively low rate at the beginning and end of construction and will peak

during mass grading of the ECO Substation pad. The peak daily rate of construction water use will be approximately 500,000 gallons. Construction water will be delivered to on-site storage facilities that will allow water to be delivered at a lower rate than the peak daily consumption rate. On-site storage facilities include baker tanks located at static Project sites and the temporary retention basin described in Minor Project Refinements #1 and #7, which were approved by the California Public Utilities Commission (CPUC) on February 7, 2013 and August 22, 2013, respectively. The temporary retention basin was constructed during mass grading activities at the ECO Substation and was lined to provide water storage during the later stages of pad grading and throughout construction of the ECO Substation. The maximum daily rate of water delivered to the Project will be on the order of approximately 500,000 gallons.

5 – CONSTRUCTION WATER SUPPLY SOURCES

The following have been identified and determined to be viable and reliable sources that will provide all of the construction water needs for the Project:

5.1 WATER/UTILITY DISTRICTS

- City of San Diego
 - Maximum total volume: 50 million gallons
- Jacumba Community Service District
 - Maximum total volume: 15 million gallons
- Live Oak Springs Water Company
 - Maximum total volume: 35 million gallons

A service confirmation letter, which is included as Attachment A: Service Confirmation Letter, City of San Diego, was issued from the City of San Diego Water Department confirming that 50 million gallons of water will be made available during construction of the Project. In addition, service confirmation letters have been issued from Jacumba Community Service District and Live Oak Springs Water Company, which are included as Attachment B: Service Confirmation Letter, Jacumba Community Service District Administrative Code and Attachment C: Service Confirmation Letter, Live Oak Springs Water Company, respectively.

SDG&E has also received a copy of Jacumba Community Service District’s Domestic Water Supply Permit from the California Department of Health Services, which is included as Attachment D: Domestic Water Supply Permit, California Department of Health Services. The California Department of Health Services confirmed that the Jacumba Community Service District water system meets the criteria for and is classified as a community water system, as discussed on page 2 of the Domestic Water Supply Permit.

The San Diego County Zoning Ordinance requires a Major Use Permit (MUP) for “Groundwater Extraction Operations”; however, the ordinance excludes public water systems permitted by the Department of Health Services from the definition of a Groundwater Extraction Operation. Moreover, Government Code Section 53091(e) provides that “zoning ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation,

storage, treatment or transportation of water,” which exempts local agencies from applicable county or city zoning ordinances. As a result, an MUP for groundwater extraction located within the Jacumba Community Service District is not required from the County of San Diego. Confirmation from the County of San Diego that an MUP is not required is included as Attachment E: Withdrawal of Major Use Permit Application, County of San Diego.

5.2 GROUNDWATER SOURCES

- Wells located on the southeastern portion of the Campo Indian Reservation
 - Maximum total volume: 53.75 million gallons

A groundwater study and summary report, included as Attachment F: Environmental Navigation Services Inc. Report, was prepared by a qualified hydrogeologist to assess the existing condition of the underlying groundwater/aquifer and all existing wells located in the southeastern portion of the Campo Indian Reservation. The study evaluated the aquifer properties and storage capacity and found that the aquifer contained sufficient groundwater to support extraction of up to 53.75 million gallons during construction without impacting short- or long-term local groundwater production or wells in the Project area. The study also addressed the potential for subsidence.

Attachment 4 to Attachment F: Environmental Navigation Services Inc. Report includes a letter from Muht-Hei, Inc. confirming the legal authority of the Campo Band of Mission Indians to sell water for use off reservation for construction purposes without an MUP from San Diego County. This interpretation is consistent with San Diego Zoning Ordinance Section 1006(c), which states that “the Zoning Ordinance shall not apply to Indian Reservation lands within the County of San Diego.”

The Final EIR/EIS estimated that construction of the Project would require the use of approximately 30 million gallons of water during construction. Although this Plan discusses an increase in the estimated amount of water needed for construction of the Project, this amount is still consistent with the analysis of impacts in the Final EIR/EIS.

6 – PLAN IMPLEMENTATION

Implementation of this Plan will be achieved by pre-construction planning in the following sequence:

1. Identify potential construction water sources
2. Investigate availability and deliverable water volume for each potential source
3. Obtain a groundwater study performed by a qualified hydrogeologist for all groundwater sources
4. Confirm compliance with all applicable laws and regulations
5. Execute service agreements with each approved source prior to construction

All of the sources identified in this Plan have been determined to be available sources with the deliverable quantities listed in Section 5 – Construction Water Supply Sources. It is anticipated

that two or more of these sources will be used during construction. The overall goal is to use the sources closest to the Project site to minimize transportation costs and impacts.

Construction water from the City of San Diego Water Department is assumed to be available at any time over the entire construction period of the Project, and by itself would be able to supply the entire construction water quantity for the Project, but requires long-distance trucking to the site. The Jacumba Community Service District, Live Oak Springs Water Company, and Campo Indian Reservation have been confirmed as compliant with applicable laws and regulations to provide water for construction of the Project, as discussed in Section 5 – Construction Water Supply Sources. In addition, the associated service confirmation letters and groundwater study have been included as attachments to this Plan. The Jacumba Community Service District, Live Oak Springs Water Company, and Campo Indian Reservation are much closer to the Project site, and will be utilized together with water from the City of San Diego to meet the peak daily volume requirements. These sources collectively provide sufficient capacity to meet the Project's construction water needs.

SDG&E will document compliance with MM HYD-3 throughout construction through submittal of a monthly water consumption report to the CPUC.

7 – MONITORING PLAN

Non-water utility/districts (i.e., Campo Indian Reservation) that are not subject to regulation by Title 22 of the California Code of Regulations (CCR) Section 64554, New and Existing Source Capacity, will implement monitoring to assess potential impacts to water levels and sensitive groundwater ecosystems. All groundwater production wells supplying construction water and existing residential/monitoring wells within the 0.5-mile radius of the production wells will be monitored. In the event that a property owner chooses to not participate in the monitoring program, documentation will be provided to the CPUC indicating that the property owner chose to not participate in the testing program.

Each groundwater production well will be fitted with a meter to document the volume of water pumped. Volumes will be recorded on a daily basis during production and reported weekly to the CPUC. In order to monitor long-term water level trends, pressure transducers will be installed in each groundwater production well and residential/monitoring wells. The pressure transducers will be programmed to record measurements every 15 minutes. In addition to these automatically recorded water level measurements, manual depth-to-water measurements will be taken at each well on a monthly basis during periods of groundwater pumping using a water level sounder. The date and time of measurement, the measuring point elevation (in feet above mean sea level), and the status of well pumping will be recorded, along with depth-to-water measurements. Water level elevation will be calculated by subtracting the depth-to-water measurement from the measuring point elevation. All water level data will be provided to the CPUC on a monthly basis in a digital format (e.g., Microsoft Excel) for the duration of the Project.

8 – REFERENCES

County of San Diego. Zoning Ordinance. Online.

<http://www.sdcounty.ca.gov/dplu/zoning/index.html>. Site visited September 24, 2012.

ECO Substation Project. Final Environmental Impact Report/Environmental Impact Statement. 2012. Online.

http://www.cpuc.ca.gov/environment/info/dudek/ECOSUB/ECO_Final_EIR-EIS.htm.

Site visited May 23, 2012.

ATTACHMENT A: SERVICE CONFIRMATION LETTER, CITY OF SAN DIEGO



THE CITY OF SAN DIEGO

January 11, 2013

Mr. Don Houston
Environmental Project Manager
San Diego Gas & Electric
1010 Tavern Road
Alpine, CA 91901

Dear Mr. Houston:

The City of San Diego Public Utilities Department (PUD) has been contacted by San Diego Gas & Electric (SDG&E) regarding construction of the SDG&E East County Substation Project (Project) located near Jacumba, California. The Project will require construction water for grading, fire suppression, dust control and other construction related activities. The permitting authority for the Project, the California Public Utilities Commission (CPUC), requires that SDG&E and its contractors obtain written documentation from all potential sources of construction water stating that a specific quantity of water will be available for use on the Project during a specified period of time.

PUD issued a Fire Hydrant Meter Permit (Permit) to SDG&E's construction contractor, Beta Engineering, on November 14, 2012. The Permit includes a meter install date of November 26, 2012, and is valid for 1 year. An extension may be requested by the applicant prior to expiration of the Permit.

At the request of SDG&E, PUD hereby confirms that up to 50 million gallons of water shall be available for Project use during the period November 26, 2012 through November 26, 2013. Upon approval of an extension of the Permit, the use period may be extended through November 26, 2014.

Walter Cooke
Water Production Superintendent
Public Utilities Department, System Operations Division

TF\jm

cc: Jesus Meda, Deputy Director, PUD, System Operations Division
Stan Medina, Deputy Director, PUD, Construction and Maintenance Division
Johnny Mitchell, Water Systems District Manager, PUD, Construction and Maintenance Division

Public Utilities Department

2797 Caminito Chollas • San Diego, CA 92105-5097
Tel (619-) 527-7470 Fax (619) 527-8098



**ATTACHMENT B: SERVICE CONFIRMATION LETTER, JACUMBA COMMUNITY
SERVICE DISTRICT ADMINISTRATIVE CODE**



JACUMBA COMMUNITY SERVICE DISTRICT
JACUMBA COMMUNITY PARK
1266 RAILROAD STREET
PO BOX 425
JACUMBA, CA 91934
(619)766-4359 PHONE
(619)766-9061 FAX

October 2, 2012

Beta Engineering California LP
9990 Mesa Rim Road, Suite 150
San Diego, CA 92121

Attn: Brian Donald, PE
Project Manager

Subject: **SDG&E East County Substation Project**
Construction Water

Dear Donald,
Jacumba Community Service District has been contacted by Beta Engineering regarding construction of the SDG&E East County Substation project located near Jacumba, California scheduled to begin in the near future. The project will require construction water for grading and dust control activities. The permitting authority for the project, the California Public Utilities Commission (CPUC), requires that SDG&E and its contractors obtain documentation from all potential sources of construction water stating that a specific quantity of water will be available for the project construction over a specific time period.

Jacumba Community Service District understands that Beta Engineering is exploring the feasibility of several sources of construction water for the project. It is possible that a significant portion of the construction water needs will be met by obtaining commitments from these other sources.

At the request of Beta Engineering, Jacumba Community Service District hereby confirms that up to 15 million gallons of non potable water, dependent on the water table will be available for project use from the Jacumba Community Service District over a 20 month period beginning November 1, 2012 ending on July 1, 2014.

Sincerely,
Jacumba Community Service District

A handwritten signature in black ink, appearing to read 'Tom Lindenmeyer', with a stylized flourish at the end.

Tom Lindenmeyer
General Manager

**ATTACHMENT C: SERVICE CONFIRMATION LETTER, LIVE OAK SPRINGS WATER
COMPANY**

Live Oak Springs Water and Power Company

37820 Old Highway 80, P.O. Box 1241, Boulevard, CA 91905 * 619-889-8666
nazar@liveoaksprings.com

October 26, 2012

Beta Engineering California LP
9990 Mesa Rim Road, Suite 150
San Diego, Ca. 92121

Attn: Brian Donald, PE
Project Manager

Subject: East County Substation Project
Construction Water

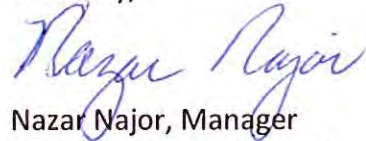
Dear Mr. Donald,

This is confirmation that water is available at Live Oak Springs Water Company.

Live Oak Springs Water Company has been contacted by Beta Engineering (BETA) regarding construction of the SDG&E East County Substation project located near Jacumba, California scheduled to begin in the near future, and as we understand it water sold to Beta by LOSWC would be used for grading, dust control and other construction related activities.

Based on our experience and production of water for other projects in the past, Live Oak Springs Water Company confirms that up to 35 million gallons of water or more will be available for project use from the Live Oak Springs Water Company over a 20 month period beginning November 1, 2012 and ending on July 1, 2014, or later.

Sincerely,



Nazar Najor, Manager
Live Oak Springs Water Company

**ATTACHMENT D: DOMESTIC WATER SUPPLY PERMIT, CALIFORNIA DEPARTMENT
OF HEALTH SERVICES**

State of California—Health and Human Services Agency
Department of Health Services



California
Department of
Health Services

DIANA M. BONTÁ, R.N., Dr. P.H.
Director



GRAY DAVIS
Governor

December 30, 2002

Tom Lindenmeyer
General Manager
PO Box 425
Jacumba, CA 91934

Dear Mr. Lindenmeyer:

**JACUMBA COMMUNITY SERVICE DISTRICT - SYSTEM NO. 3710011
FULL SYSTEM PERMIT (NO. 05-14-02P-015)**

The State Department of Health Services has issued a domestic water supply permit for the Jacumba Community Service District. The permit and engineering report are enclosed. Please advise the Department in writing within 30 days if you do not agree to the permit or the permit conditions.

If you have any questions regarding this letter, please contact Roger Keister at (619) 645-2573 or myself at (619) 525-4497.

Sincerely,

A handwritten signature in black ink that reads 'Brian Bernados'.

Brian Bernados, P.E.
District Engineer
San Diego District

cc: County of San Diego, Department of Environmental Health

H:\Systems\Jacumba Community SD\Permits\Jacumba 02 Permit\Jacumba Full Permit Letter.doc



Do your part to help California save energy. To learn more about saving energy, visit the following web site:
www.consumerenergycenter.org/flex/index.html

STATE OF CALIFORNIA
DEPARTMENT OF HEALTH SERVICES

Certificate of Issuance
OF A
WATER SUPPLY PERMIT
TO
JACUMBA COMMUNITY SERVICE DISTRICT

This is to certify that a water supply permit (Permit # 05-14-02P-015) has been issued to the Jacumba Community Service District on September 30, 2002, to supply water for domestic purposes to the City of Jacumba. The permit was issued by the Department of Health Services, pursuant to the provisions of Division 104, Part 12, Chapter 4, Article 7, of the California Health and Safety Code. The permit is subject to the requirements of Title 22, California Code of Regulations, and to the conditions provided in the water supply permit.

A copy of the water supply permit is on file with the Jacumba Community Service District or may be obtained by contacting the San Diego District Office of the Department of Health Services, Drinking Water Field Operations Branch, 1350 Front Street, San Diego, CA 92101.



A handwritten signature in cursive script that reads "Brian Bernados".

Brian Bernados P.E., San Diego District Engineer

STATE OF CALIFORNIA

DOMESTIC WATER SUPPLY PERMIT

Issued To

JACUMBA COMMUNITY SERVICE DISTRICT

3710011

By The

California Department of Health Services,

Division of Drinking Water & Environmental Management Branch



PERMIT NUMBER 05-14-02P-015

DATE: 12/30/2002

WHEREAS:

1. The Jacumba Community Service District water system was inspected on December 13, 2002, by the California Department of Health Services to issue a new public water system permit.
2. This public water system is known as the Jacumba Community Service District whose headquarters is located on 1266 Railroad Street, Jacumba, CA 91934.
3. The legal owner of the Jacumba Community Service District water system is the Jacumba Community Service District. The Jacumba Community Service District, therefore, is responsible for compliance with all statutory and regulatory drinking water requirements and the conditions set forth in this permit.
4. The public water system is as described briefly below (a more detailed description of the permitted system is described in Section 1.3 of the attached Permit Report):

The water system is a small community water system that supplies water for domestic purposes to approximately 500 residents through 234 service connections. The Jacumba Community Service District obtains water from two wells. The primary source is well No. 4 and well No. 5 is the secondary source. The District maintains 2 different pressure zones with 1 booster station and one 0.2 MG bolted steel reservoir for storage of treated water. There are no interconnections with any other water system.

5. The service area of the Jacumba Community Service District shall be discussed in section 1.5 of the Permit Report.

And WHEREAS:

1. The Jacumba Community Service District has submitted all of the required information relating to the proposed operation of the Jacumba Water System.
2. The California Department of Health Services has evaluated all of the information submitted by the Jacumba Community Service District.
3. The California Department of Health Services has the authority to issue domestic water supply permits pursuant to Health and Safety Code Section 116540.

THEREFORE: The California Department of Health Services has determined the following:

1. The Jacumba Community Service District water system meets the criteria for and is hereby classified as a community water system.
2. The water system has demonstrated that Jacumba Community Service District water system has sufficient source capacity to serve the anticipated water demand for at least 5 years.
3. The design of the water system complies with the Water Works Standards and all applicable regulations except that Well No. 4 does not have a 50 ft. sanitary seal.
4. Provided the following conditions are complied with, the Jacumba Community Service District water system should be capable of providing water to consumers that is pure, wholesome, and potable and in compliance with statutory and regulatory drinking water requirements at all times.

THE JACUMBA COMMUNITY SERVICE DISTRICT IS HEREBY ISSUED THIS DOMESTIC WATER SUPPLY PERMIT TO OPERATE THE JACUMBA COMMUNITY SERVICE DISTRICT WATER SYSTEM.

The Jacumba Community Service District (District) shall comply with the following permit conditions:

Safe Drinking Water Act

1. The District shall comply with all State laws applicable to the District, including, but not limited to the Health and Safety Code and any regulations, standards, or orders adopted there under.

Approved Sources & Treatment

2. This permit authorizes the District to use the following sources: Well No. 4 as the primary source and Well No. 5 as a standby source.

Source	Status	Capacity	PS Code
Well No. 4	Active	200 gpm	3710011-004
Well No. 5	Standby	180 gpm	3710011-005

3. The District shall provide reliable chlorination for Wells No. 4 and Well No. 5 at all times. The only approved treatment includes the following process:

Facility	Treatment	Location/Remark
Chlorinator	Sodium Hypochlorite	At Well Head

4. The District will generate an Emergency Chlorination Plan and submit a copy to the Department by March 31, 2003.
5. No changes, additions, or modifications shall be made to the sources or treatment in Provisions No. 2 and 3 unless an amended water permit has first been obtained from the Department.
6. By July 1, 2003, the District shall drill, equip, and test a new well.

Maximum Contaminant Levels

7. All water supplied by the District for domestic purposes shall meet all Maximum Contaminant Levels (MCLs) established by the State Department of Health Services. If the water quality does not comply with the California Drinking Water Standards, treatment shall be provided to meet standards.

Cross-Connection Control Program

8. The District must submit a copy of their cross-connection control ordinance to the Department by March 31, 2003.
9. The District must establish a contract with a certified cross-connection control specialist by March 31, 2003.
10. The District shall maintain an active cross-connection control program in accordance with the Regulations Relating to Cross-Connections, California Code of Regulations, Title 17. All cross connections shall be abated within 30 days of their identification.

Annual surveys shall be conducted thereafter. Backflow prevention devices shall be tested at least yearly. The District shall submit an annual report to the Drinking Water Field Operations Branch system outlining the cross-connection control program for the previous year including the name and certification of the person assigned to the program, number of inspections made, number of backflow devices installed in the system and the number of devices tested and repaired.

Water Quality Monitoring

11. The District shall generate a Disinfectants/Disinfection Byproduct rule monitoring plan by March 31, 2003.
12. Prior to using a new source, and to continue using the existing source for domestic purposes, bacteriological and complete chemical analysis of the water produced, including general mineral, general physical, inorganic chemicals, nitrates, and nitrites shall be submitted to the SDHS-DWFOB, San Diego District Office, to determine compliance with the California Drinking Water Quality Standards. The analyses shall be made by an approved laboratory and shall be submitted on state approved forms
13. Prior to using a new well the District shall obtain and submit to the Department, copies of the geological logs (State Well Driller's Report), completed well data forms and plot plan of the well sites showing all sources of contamination within 200 feet of the wells.
14. The District shall monitor the distribution system for bacteriological water quality according to a Department-approved Coliform Sample Siting Plan. A bacteriological analyses report shall be submitted to this office by the tenth of the month following sampling signed by the Manager, Superintendent, or Chief Operator including a list of water quality complaints and any reports of waterborne illnesses received from consumers.
15. Pursuant to CCR, Title 22, Section 64451, all water quality monitoring results obtained in a calendar month shall be submitted to the Department on paper by the tenth day of the following month.
16. Pursuant to CCR, Title 22, Section 64451, all chemical analysis shall be performed by a State-certified laboratory. The District must require their contract laboratory to report water quality results to the Department using Electronic Data Transfer (EDT) using the Primary Station Code (PS_Code). This requirement excludes bacteriological monitoring, which shall be submitted directly to the Department on paper.
17. The District shall contact this office by phone concerning any acute violation or the occurrence of a hazardous situation in a timely manner. MCL violations will require public notification and corrective action.

Storage Reservoirs Basic Design

18. The storage reservoirs shall comply with the California Waterworks and American Water Works Association (AWWA) design and construction standards. Distribution reservoirs shall be covered. Vents, overflows, drain outlets and other openings shall be located and constructed to protect the water in the reservoir from contamination. Vents and overflows shall be screened and adequately air-gapped to prevent cross-connections. Overflows shall be large enough to dispose of reservoir overflow rates equal to the maximum reservoir-filling rate. Provisions shall be made to facilitate removal of floating material from the free water surface and for dewatering the

reservoir. Outlets shall be designed and constructed to minimize movement of sediment from the reservoir floor to the distribution system water mains. Provisions shall be made for isolating the reservoir(s) and appurtenant facilities from the distribution system without causing pressure problems in the distribution system.

19. Distribution reservoir sites shall not be used for non-water works purposes that would either result in unrestricted public access, compromise security, or create a contamination hazard.
20. Reservoirs shall be disinfected and sampled for bacteriological quality in accordance with the AWWA procedures for disinfecting tanks and reservoirs prior to domestic use.

Storage Reservoir Coating/Lining

21. The District shall use only NSF drinking water approved reservoir coatings, linings and their adhesives for its storage reservoirs. Otherwise, a VOC sample shall be collected after the newly coated/lined reservoir is filled and a minimum 5 day soaking period is allowed. In addition to the chemicals on the standard list (Method 524) analyses shall be made for ortho-Xylene, para-Xylene, meta-Xylene, methylethylketone (MEK), methylisobutylketone (MIBK) and any other solvent in the coating/lining adhesive included in the material Safety Data Sheet (MSDS) must also be included in the sample analysis. The results of the VOC analysis must be submitted to the Department.

Distribution System

22. The distribution system shall comply with all applicable California Waterworks and American Water Works Association (AWWA) design and construction standards and in compliance with the SDHS-DWFOB Guidelines for the Separation of Water and Sewer Lines. At least 10 feet horizontal and 1-foot vertical separation shall be maintained between the water and sewer lines. Water lines should always cross above sewer lines. Special construction standards and materials shall be provided where the minimum separation cannot be met.

Direct Additives

23. Pursuant to CCR, Title 22, Section 64700, no chemical or product shall be added to the drinking water as part of the treatment process unless it has been certified as meeting the specifications of the American National Standards Institute/National Sanitation Foundation (ANSI/NSF) Standard 60.

Annual Report to DHS

24. The District shall submit the Annual Report on the status and condition of the domestic water system as directed by the Department.

This permit supersedes all previous domestic water supply permits issued for this public water system and shall remain in effect unless and until it is amended, revised, reissued, or declared to be null and void by the California Department of Health Services. This permit is non-transferable. Should the Jacumba Community Service District water system undergo a change of ownership, the new owner must apply for and receive a new domestic water supply permit.

Any change in the source of water for the water system, any modification of the method of treatment as described in the Permit Report, or any addition of distribution system storage

reservoirs shall not be made unless an application for such change is submitted to the California Department of Health Services.

This permit shall be effective as of the date shown below.

FOR THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES



Brian Bernados, PE
District Engineer

Dated: 12-30-82

H:\Systems\Jacumba Community SD\Permits\Jacumba 02 Permit\Jacumba 02 Permit.doc

**ATTACHMENT E: WITHDRAWAL OF MAJOR USE PERMIT APPLICATION, COUNTY OF
SAN DIEGO**



County of San Diego

ERIC GIBSON
DIRECTOR

DEPARTMENT OF PLANNING AND LAND USE

5201 RUFFIN ROAD, SUITE B, SAN DIEGO, CALIFORNIA 92123-1666
INFORMATION (858) 694-2960
TOLL FREE (800) 411-0017
www.sdcounty.ca.gov/dplu

November 21, 2011

ESJ U.S. Transmission LLC.
Alberto Abreu, Director Project Development
Sempra Global
101 Ash Street, HQ08B
San Diego, CA 92101

WITHDRAWAL OF MAJOR USE PERMIT APPLICATION

CASE NUMBERS: 3300-10-014 (P); ER. 09-22-001 PROJECT NAME: ESJ-US Generation-Tie Line Project; Old Highway 80, Jacumba, Mountain Empire Subregional Planning Area; APN; 660-040-32

Dear Mr. Abreu:

The Department of Planning and Land Use (DPLU) has determined that the Major Use Permit for groundwater extraction located within the Jacumba Community Service District is not required. The zoning ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water....." Gov. Code, section 53091(e). This exemption applies to the facilities of public agencies, such as water districts. Therefore, the County has withdrawn your Major Use Permit Application and has reversed \$3060 back to your trust PLU trust account 09-0107420, for the time spent processing the application. If you have any questions or need additional information, please contact me at (858) 694-301, Patrick Brown or at Patrick.Brown@sdcounty.ca.gov

Sincerely,

Patrick Brown, Project Manager
Project Planning Division

cc: AECOM, Inc. Michael Page, 1420 Kettner Boulevard, Suite 500, San Diego, CA 92101
Ed Sinsay, Team Leader, Department of Public Works, M.S.O650
David Sibbet, Planning Manager, Department of Planning and Land Use M.S.O650

ATTACHMENT F: ENVIRONMENTAL NAVIGATION SERVICES INC. REPORT

ENVIRONMENTAL NAVIGATION SERVICES, INC.

Mr. Jed Francis
Jed Francis, Inc. (JFI)
9530 Haggeman Road
Bakersfield, CA 93312

June 14, 2013
8 pages plus attachments

**RE: Evaluation of Short-term Construction Water Supply
Obtained from the Southeastern Portion of the Campo Indian Reservation.**

ENSI has prepared this summary report per your request to evaluate the potential short-term water supply using water wells located within the southeastern portion of the Campo Indian Reservation (**Figures 1 and 2**, the "Site"). This is an area that has been considered to be used to provide construction water for the previously-proposed Campo Landfill, and for the Shu'luuk Wind Project. It is understood that the Shu'luuk Wind Project will not require water for the next two years and the Campo Kumeyaay Nation Government (formerly known as the Campo Band of Mission Indians) has recently approved the use of the Site for your commercial purposes.

Under consideration by JFI is a contract to supply construction water to support the construction of a SDG&E electrical power substation known as the East County (ECO) Substation Project¹. The 58-acre substation will be located at 47317 Old Highway 80, Jacumba, between Interstate 8 and the U.S./Mexico Border. It is understood the Project will require 150 AcFt of water over an approximately 2-year construction period. Thus this evaluation considers the short-term (maximum 2-year, potentially less) production of non-potable construction water from the Site. Water requirements are expected to vary over time, with the bulk of the water needed this year. The proposed groundwater demand is estimated to be 165 AcFt, assuming an additional 10% to allow for losses prior to use.

This summary is intended to provide the information request described in mitigation measure MM HYD-3, associated with the San Diego Gas & Electric East County Substation Project (Application A.09-08-003) Final Environmental Impact Report/Environmental Impact Statement. A description of MM HYD-3 is included as **Attachment 1**.

The proposed water supply is located within 1,462 acre watershed within a sparsely inhabited portion of the Camp Indian Reservation. Multiple wells are available for use within the central portion of the watershed (**Figure 2**). As further detailed in this summary report the aquifer system is primarily comprised of highly weathered granitic rock (tonolite) with a storage capacity of 2,559 acre-feet (AcFt²). Annual rainfall in the watershed is approximately 15 inches per year, with an annual average recharge rate of 230 AcFt/yr. Based on review of the potential impact of short-term (maximum 2-year) groundwater use, 165 AcFt can be obtained from the Site without significant impacts. Over two years the current residential and proposed demand would total 177 AcFt, approximately equal to the long-term annual extraction rate of 173 AcFt/yr determined from long-term historical rainfall data and recharge rates further described in **Attachment 2**.

¹ A Project description is available at: <http://www.sdge.com/key-initiatives/eco-substation/eco-substation-project>

² This summary reports water volume in acre-feet, the amount of water that can cover one acre to a depth of one foot (approx.. 326,000 gallons). For reference 165 AcFt would be required to irrigate approximately 40 to 55 acres of alfalfa.

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Included in this summary letter is supporting information specific to:

- Aquifer Description, Recharge, and Storage
- Proposed Water Supply Wells
- Groundwater Demand and Potential Impact of Pumping
- Potential for Subsidence
- Compliance with Laws
- Conclusion

It is based on the following:

- *Water Supply Evaluation Proposed Campo Landfill Project*. Dated October 8, 2008. Prepared for BLT, Inc. Prepared by Environmental Navigation Services, Inc. (ENSI, 2008) This report was included in the Draft Campo Regional Landfill Supplemental EIS, dated February 2010, prepared by the US Bureau of Indian Affairs (BIA).

The ENSI (2008) report evaluated whether the proposed landfill project demand could be met over the 30 year landfill operation period - it did not examine the maximum sustainable water extraction rate.

- Re-examination of the impact of water production described in ENSI, 2008 to examine the long-term sustainable pumping rate using significance criteria currently used by the County of San Diego Department of Planning and Land Use. The 2008 study was also updated to include rainfall data through June 2013. The long-term rate of water extraction for the Site has been determined to be 173 AcFt/year for the 1,462 acre watershed.

Relevant portions of the previous report have been revised, together with updated water balance calculations (Excel spreadsheets), and are included in **Attachment 2**.

- Recent well testing and preparation work conducted by JFI specific to existing wells HG-21A, and HG-60. These wells have a combined tested capacity of 160 gpm, or 256 AcFt per year. Additional capacity may also be provided by well HG-31 and other wells available for use within the area depicted in **Figure 2**. [**Attachment 3**]

Aquifer Description, Storage, and Recharge

Aquifer Description

The water supply is based on a 1,462-acre watershed located within the southeastern portion of the Campo Indian Reservation (**Figure 2**). Field observations demonstrate the rock exposed within the watershed is a highly weathered granitic rock known as tonolite. The area is generally covered in soils developed in place by extensive weathering (**Figure 3**), with limited exposures/outcrops of rock. The surficial rock, locally described as decomposed granite (DG), transitions with depth to unweathered rock.

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From a hydrogeologic perspective, the aquifer (or hydrogeologic unit) is entirely within one granitic rock type- tonolite. Groundwater within the aquifer system is generally described to occur under unconfined conditions with the majority of groundwater in storage occurring within the DG. The depth to groundwater varies from approximately 8 to 90 ft below ground surface, and generally decreases (gets nearer to ground surface) in the lower elevations of the watershed. Water levels within the watershed vary seasonally in response to rainfall recharge that primarily occurs during winter.

Underlying the DG is unweathered bedrock. Water storage and transmission in the bedrock is comparatively limited due to fracture flow conditions. Variable confined to unconfined conditions are expected to occur depending on the interconnectivity of the fracture network and DG relative to wells completed in the aquifer system.

Groundwater Storage

Groundwater occurs in an aquifer system comprised of both weathered and unweathered tonolite (DG). This water supply analysis focuses on the extent and thickness of saturated DG because this is the portion of the aquifer that stores the majority of groundwater. The extent of saturated DG in the watershed is shown in **Figure 4** (from ENSI, 2008). For purposes of this water supply evaluation it is assumed that an average of 30 feet of saturated DG occurs in the watershed. The calculation is based on the contour map of the saturated thickness of DG in the watershed as follows:

Area 0 to 20 ft: 1462 acres, with an average of 5 ft of saturated DG
Area 20 to 60 ft: 671 acres, with an average of 40 ft of saturated DG
Area 60 to 100 ft: 222 acres, with an average of 80 ft of saturated DG
Area > 100 ft: 110 acres, with an average of 110 ft of saturated DG

Groundwater in storage is calculated based on the types and volume of rock as detailed in **Attachment 2** where DG has a storage capacity of 5%, and underlying rock has a storage capacity of 0.05% (by volume). In total the calculations support a storage capacity of 2,559 AcFt (2,193 AcFt in DG and 366 AcFt bedrock) within the 1,462 acre watershed.

Recharge

An annual average recharge rate of 230 AcFt/year has been calculated for the watershed using a monthly soil moisture balance methodology. Incorporated into the analysis are historical precipitation data (1945 to 2012), evapotranspiration rates, soil moisture capacity, and surface water runoff rates. The analysis was done using historical rainfall data for Campo, CA. Each month a calculation is made to compare the soil moisture content with the historical rainfall rate. The water is either returned to the atmosphere as evapotranspiration, leaves as runoff, or enters the subsurface as recharge when the soil moisture holding capacity is exceeded (i.e. the soil is 'wet'). Further description is included in **Attachment 2**.

The rainfall recharge rate varies monthly and seasonally. There are extended periods where rainfall is insufficient to sufficiently wet the soil and allow water to pass into the ground as recharge. Conversely, during 'wet' years when recharge significantly exceeds the pumping rate, storage is exceeded and recharge is effectively rejected.

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The soil moisture balance methodology used here to determine historical recharge rates is based on the extent and type of soils within the watershed. The US Department of Agriculture's Natural Resources Conservation Service (NRCS, formerly known as the US Soil Conservation Service) maintains a library of soils maps for the area. (<http://websoilsurvey.nrcs.usda.gov>).

Figure 3 shows the surficial soils in the water supply watershed. All of these soils are derived from the in-place weathering of granitic rock and generally reflect the surficial geology. The soils data are further described in **Attachment 2**.

Recharge occurs across the watershed and may be enhanced by water that temporarily accumulates in washes and drainage channels. Stormwater flows following high-intensity rainfall events are infrequent and of short duration. There are no perennial streams or surface waters (ponds or lakes) within the watershed that would be affected by short- or long-term groundwater use.

Proposed Water Supply Wells

There are numerous groundwater monitoring/test wells within the watershed that were installed during the 1990s for a proposed landfill project. JFI has subsequently converted and tested two wells, HG-21A and HG-60, for production well use. These existing landfill monitoring/test wells were converted for use as water supply wells by enlarging the boreholes for the installation of inner well casing.

Follow-up pumping tests conducted by Thing Drilling Company of Alpine, CA have demonstrated short-term production rates of 60 gpm in HG-21A, and 100 gpm in HG-60. The two wells have a total capacity of 160 gpm, approximately 256 AcFt per year. HG-31, described by AECOM (2012)³ is also available for use with a reported capacity of 25 gpm. Long-term well capacity rates may be less; however, additional wells such as HG-31 are available within the water supply area (depicted in **Figure 2**). Approximate locations are indicated in **Figure 2** - specific location information is considered confidential by the Tribal Government.

Operation of these two wells at an annual rate 165 AcFt/yr (the total project demand) would be at approximately 64% of their measured short-term capacity.

Groundwater Demand and Potential Impact of Pumping

Current Groundwater Demand

The Site area is sparsely inhabited as a large portion of the southeastern Reservation is commercially zoned and was reserved until recently for the construction of a regional landfill. The recent study conducted by AECOM (2012) for a similarly-sized watershed supports that there are 12 residence served by private wells within the watershed with an estimated demand of 6 AcFt/yr.

³ Groundwater Resource Evaluation Shu'luuk Wind Project, Campo Reservation, Campo, San Diego County, California. Dated December 2012. (AECOM, 2012) Contained within a Draft Environmental Impact Statement Prepared for the Campo Band of Mission Indians and the Southern California Agency Bureau of Indian Affairs. Prepared by: AECOM, 7807 Convoy Ct, Suite 200 San Diego, California 92111.

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Potential Impact of Pumping

Although the County of San Diego has no jurisdiction over land or groundwater use on the Reservation, *the County of San Diego's Groundwater Ordinance and Guidelines for Determining Significance – Groundwater Resources* were used as guidelines for the Site analyses⁴. The County Department of Planning and Land Use (DPLU) significance guidelines were generally developed for application to the California Environmental Quality Act (CEQA). There are two primary significance criteria to be addressed for the Site:

Criteria 1)

Will the short-term groundwater use cause the volume of water in groundwater storage drop to less than 50% of the aquifer capacity based on the projected pumping rates?

Criteria 2)

Will groundwater use cause off-Reservation water levels to drop more than 5%, based on well with 400 feet of water (in this case a 20 foot drop)?

In both cases the wellfield is conservatively assumed to operate for one year or less and pump 165 Acft of water.

Criteria 1 has been conservatively assessed using the water balance analysis described in **Attachment 2**. A maximum annual use of 173 AcFt/yr has been determined to be not significant for long-term pumping. A long-term aquifer water balance was calculated using the historical rainfall record based on the rate of recharge from the soil, the amount of water that can be stored in the aquifer, and the amount of water pumped from the aquifer on an annual basis. In any given year the volume of water in the aquifer will vary depending on the relative recharge rate and groundwater demand. If pumping demand is less than the recharge rate there is no change in groundwater storage. Years with recharge in excess of the aquifer storage and groundwater use lead to a condition where the excess recharge is rejected. Conversely, following periods of low rainfall, continued depletion of groundwater from storage occurs. The overall results of the long-term water balance calculation are shown in **Figure 5** for the 1462-acre watershed. The volume of water in storage decreases in years where the pumping rate exceeds recharge, but never to less than 50% of the aquifer volume as mandated by the DPLU significance criteria.

The long-term pumping rate is a conservative standard when applied to a 2-year project. Review of **Table 1** demonstrates that the short-term demand represent a small percentage of the overall aquifer storage, is less than the average annual recharge rate, and will be readily replenished by rainfall recharge. A rate higher than 173 AcFt/yr could be supported under *Criteria 1* because this short-term water supply analysis differs from long-term sustainable water supply evaluation, for example those done locally for the County of San Diego Department of Planning and Land Use, in that it allows for short-term aquifer depletion provided that the water will be replenished by recharge within a period of a few years.

⁴ Dated 3/19/2007 and available at: <http://www.sdcounty.ca.gov/pds/procguid.html#Groundwater>

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Criteria 2 is addressed by examining the short-term impact of instantaneously pumping⁵ 165 AcFt from the aquifer system without any offsetting rainfall recharge. Here the focus is on potential off-Reservation water level impacts. (For reference the closest off-Reservation point is 1,250 feet from the wellfield as depicted in **Figure 2**.) Water levels will change proportionally to the amount of groundwater storage, in this case water that is ultimately drained from the overlying DG portion of the aquifer system. The water level declines are greatest at the pumping wells, and form a ‘cone of depression’ where water levels changes diminish with distance away from pumping wells.

A 20 foot drop in water level within weathered rock (DG) with a storage coefficient of 5% corresponds to the pumping of one AcFt of water per acre. Thus for illustration if the pumping-related water level decline is evenly spread around an area being pumped, 165 acres would produce 165 AcFt with a less than significant 20-ft water level decrease absent any rainfall recharge. This is a conservative approximation- the water levels within the cone of depression will be higher than 20 feet within the well field and less than 20 feet at the outer limits of the pumping influence.

Here the primary concern is whether significant water level decline (i.e greater than 20 feet) will occur off-Reservation. The center of the wellfield area is approximately 2250 feet from the closest Reservation Boundary (to the southwest as shown in **Figure 2**). Thus potential on-Reservation pumping impacts could extend radially over an area of approximately 365 acres if a 2250 foot radius is extended around the center of the wellfield. Pumping would be within the 110 acre wellfield area shown in **Figure 2** within the Campo Reservation where the extent of saturated DG ranges from approximately 40 to 100 feet (see **Figure 4**). If the short-term demand of 165 acre-feet is combined with one year of residential use (6 AcFt) a total of 171 AcFt would be withdrawn from an approximately 365 acre area. Under this circumstance there would be an average water level drop of 9.4 feet over the area based on a 5% storage capacity, much less than the 20-ft significance criteria. Again this is a conservative assessment as the water level changes rapidly decrease with distance.

In summary the proposed 165 AcFt short-term demand (171 AcFt when combined with existing use and obtained in one year) is less than the 230 AcFt/yr annual rainfall, approximately 6% of the total aquifer storage capacity, can be obtained from the Reservation with no significant off-Reservation water level impacts, and is approximately the same as the long-term sustainable rate of 173 AcFt/yr. Based on these findings no mitigation monitoring is necessary. ENSI (2008) did recommend a monitoring program based on the considerations that the proposed project was to be implemented over a 30-year period and included a landfill that would have created a large impermeable area within the watershed and disrupt rainfall recharge.

⁵ The overall volume and potential off-Reservation impact of pumping is generally the same independent of the production rate for the unconfined aquifer system.

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Table 1. Summary of Hydrologic Water Balance Calculations

Watershed Area	1,462 acres	See Figure 2
Groundwater Storage (AcFt)	2,559	2,193 AcFt in Decomposed Granite (avg. saturated thickness of 30 feet) 366 from bedrock (avg. saturated thickness of 500 feet)
Average Annual Rainfall Rate (1945 to 2012)	14.58 inches/yr 1,776 Acft/yr in watershed	See Attachment 2
Average Annual Recharge Rate (1945 to 2012)	230 AcFt/yr	See Attachment 2
Long-term sustainable pumping rate	173 AcFt/yr	Based on maximum extraction of 50% of groundwater in storage, 1945 to 2012 (173 AcFt is 6.8% of total storage)
Proposed Extraction Rate and duration	165 AcFt	150 AcFt + 10% Over a maximum of two years.
One-year Extraction Rate, Including Existing Uses	171 AcFt/yr	Includes 6 AcFt/yr existing use for 12 residences.
Net Recharge (Recharge - Pumping)	+ 59 AcFt (1-year) + 283 AcFt (2-year)	If all water obtained in one year, or over two years (including existing use of 6 AcFt/yr)
Percentage of Storage Used (annual demand absent rainfall recharge)	6.4% 6.7% 6.8%	165 AcFt for project 171 AcFt for project and existing uses 173 AcFt based on 50% storage criterion

Potential for Subsidence

Neither study discussed the potential for subsidence as it is generally not of concern because the Site is located in crystalline rock terrain. As described in the Final EIR/EIS for the ECO Substation project (page D.13.8): “The risk factors for groundwater withdrawal induced subsidence—deep, extensive accumulation of soft, unconsolidated alluvial deposits and compressible clay beds—are not present in the project area where groundwater extraction is proposed (ECO Substation and Tule Wind project areas). The underlying rock units are granitic hard rock in these areas, and the alluvial thickness is limited. The granitic rock aquifer is too rigid to subside in response to water-level changes.”

Compliance with Laws

The water supply is located within the Campo Indian Reservation and not subject to County of San Diego or State of California jurisdiction. It is subject to laws and regulations applicable to the Campo Reservation. See attached letter (**Attachment 4**) that has been provided to JFI.

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Conclusions

This summary report examines and supports the short-term pumping of 165 AcFt of water from a 1462 acre watershed with a storage capacity of 2559 AcFt. The amount of groundwater in storage greatly exceeds the proposed short-term and existing demand where the proposed demand is approximately 6% of total groundwater in the storage within the water supply area. Rainfall recharge, here calculated to be 230 AcFt/yr on an average annual basis, exceeds the short-term demand on an annual basis and will readily replenish the aquifer system. The short-term demand is also less than the long-term sustainable demand of 173 AcFt/yr determined using water balance calculations based on historical rainfall data.

If you have any further questions, please feel free to contact the undersigned.

Sincerely,



Jay W. Jones PG#4106
Environmental Navigation Services, Inc.

Attachments:

- Figure 1. Site Location Map
- Figure 2. Study Area Map
- Figure 3. Soils in the Watershed
- Figure 4. Extent of Saturated DG in the Watershed
- Figure 5. Long-term Water Balance, 1462-acre Watershed

- Attachment 1. MM HYD-3 (from the October 2011 Final EIR/EIS)
- Attachment 2. Supplemental Water Balance Calculations
- Attachment 3. Supplemental Well and Test Logs, Wells MW-21A and HG-60
- Attachment 4. Letter to JFI from Muht-Hei, Inc.



SITE LOCATION MAP

Campo Indian Reservation
San Diego County, California

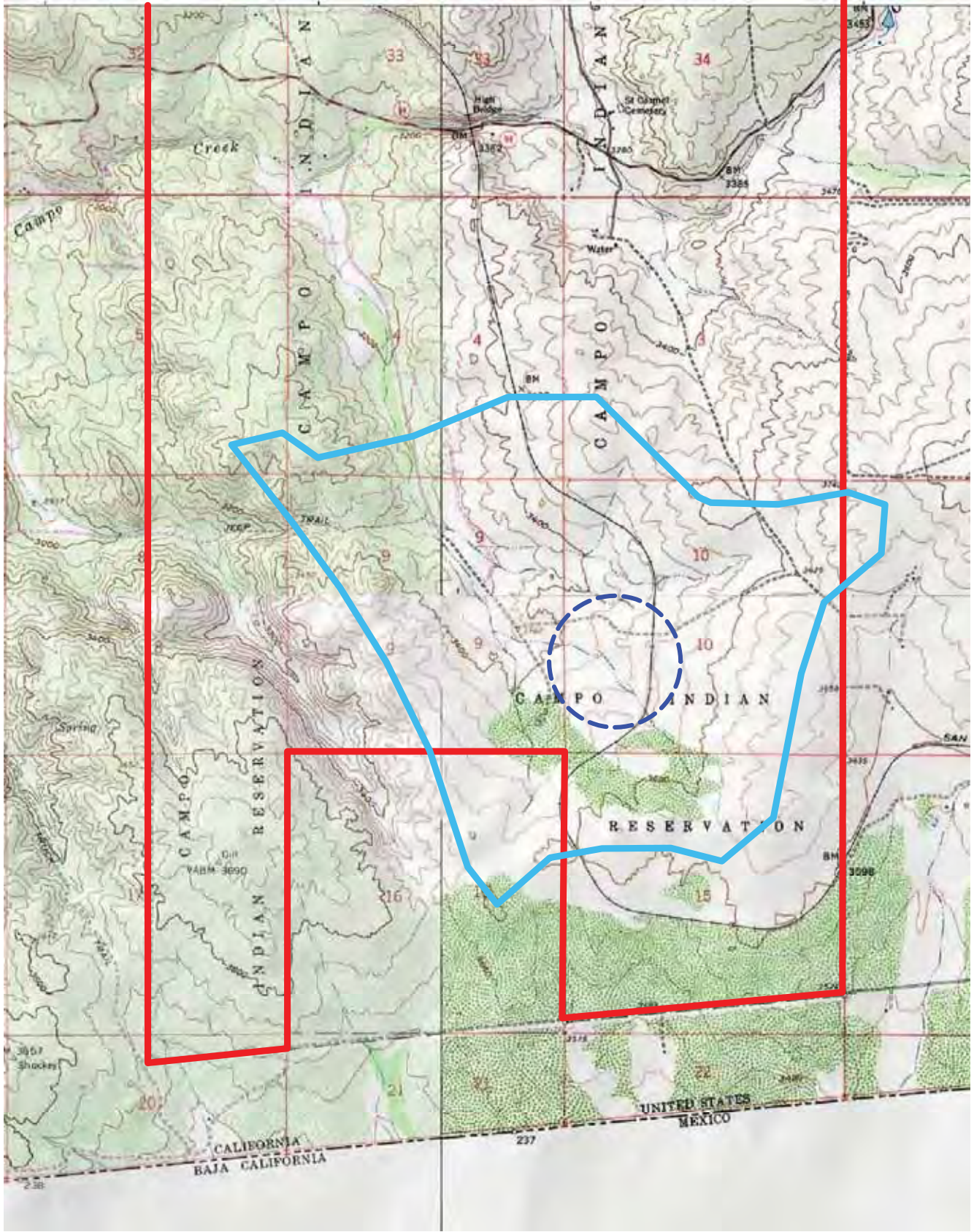
PE/PG	JWJ	Project Number	SECWS	Figure	1
Project Manager	JWJ	Drafter	CM	Date	

EXPLANATION BLOCK

Map Source: SEIS, 2008

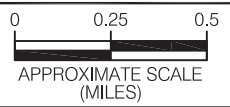
**Environmental
Navigation
Services, Inc.**

SCALE: AS SHOWN



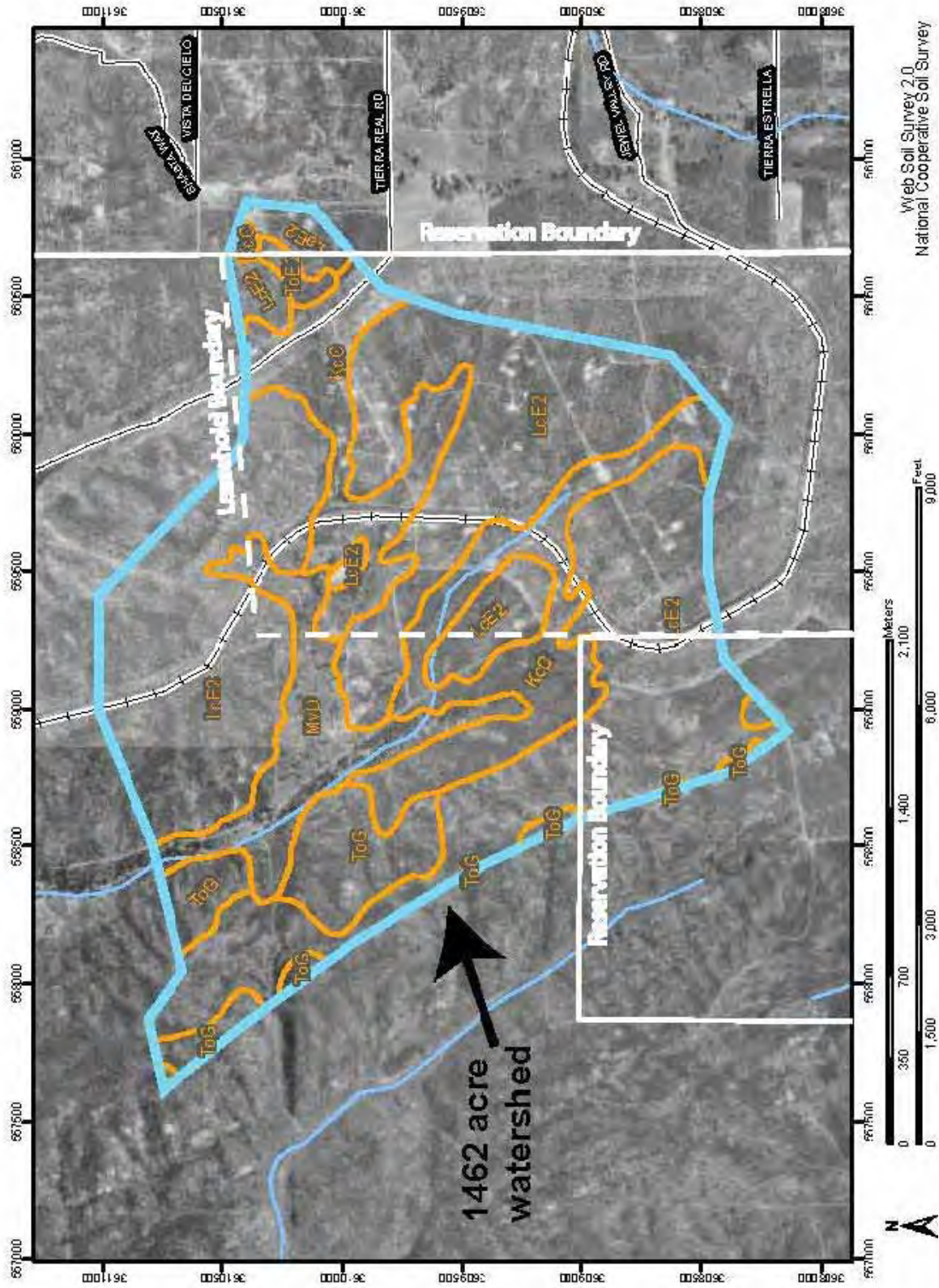
**Environmental
Navigation
Services, Inc.**

- EXPLANATION BLOCK
- ENSI 2008 STUDY AREA
 - RESERVATION BOUNDARY
 - ⊙ AREA SUPPLY WELL LOCATION



**WATER SUPPLY
STUDY AREA**
Campo Indian Reservation
San Diego County, California

PE/PG JWJ	Project Number SECWS	Figure 2
Project Manager JWJ	Drafter CM	
		Date 06/13/2013



Web Soil Survey 2.0
National Cooperative Soil Survey

SOILS WITHIN THE WATER SUPPLY WATERSHED

Campo Indian Reservation
San Diego County, California

PEP#	JWJ	Project Number	SECWS	Figure	3
Project Manager	JWJ	Drafter	CM	Date	

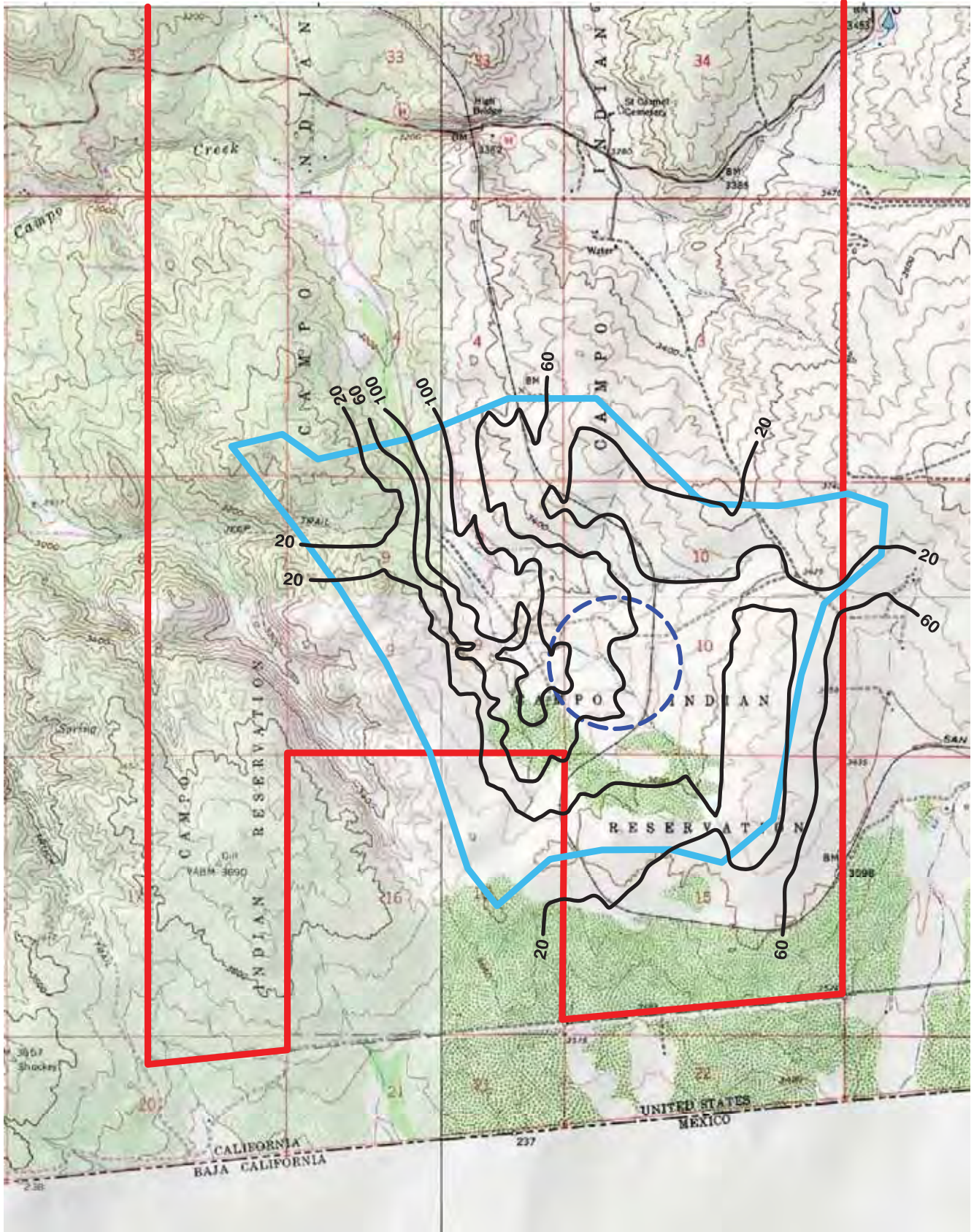
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NOTE:

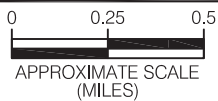
Image Source ENSI, 2008

Environmental Navigation Services, Inc.

SCALE AS SHOWN



**Environmental
Navigation
Services, Inc.**



EXPLANATION BLOCK

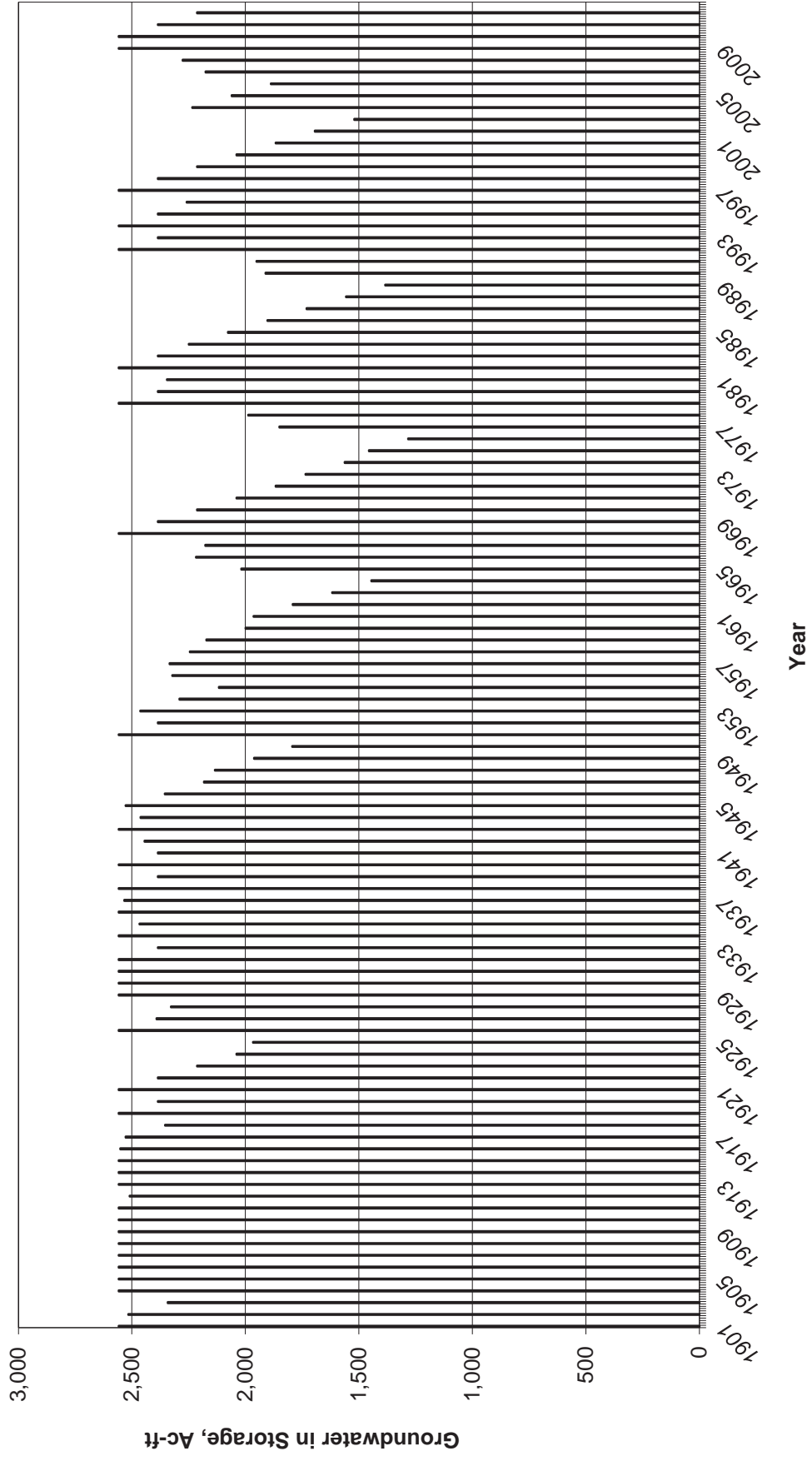
- ENSI 2008 STUDY AREA
- RESERVATION BOUNDARY
- ⊙ AREA SUPPLY WELL LOCATION

**EXTENT OF SATURATED
DG IN THE WATERSHED**

Campo Indian Reservation
San Diego County, California

PE/PG JWJ	Project Number SECWS	Figure 4
Project Manager JWJ	Drafter CM	
		Date 06/13/2013

**Figure 5: SE Campo Water Balance
1462-acre Watershed, 2559 AcFt in storage
171 AcFt/yr pumping rate**



Attachment 1.
MM HYD-03

MM HYD-3 Identification of sufficient water supply. Prior to construction, the applicant will prepare comprehensive documentation that identifies one or more confirmed, reliable water sources that when combined meet the project's full water supply construction needs. Documentation will consist of the following:

Preparation of a groundwater study. For well water that is to be used, the applicant will commission a groundwater study by a qualified hydrogeologist to assess the existing condition of the underlying groundwater/aquifer and all existing wells (with owner's permission) in the vicinity of proposed well location/water sources. The groundwater study will evaluate aquifer properties and aquifer storage. The groundwater study will estimate short- and long-term well water supplies from each well proposed to be used, and documentation indicating that each well is capable of producing the total amount of water to be supplied for construction from each well. The groundwater study will estimate short- and long-term impacts of the use of the well(s) on the local groundwater production (short-term extraction for construction water and ongoing O&M water), on all project wells, and on other wells in the project area. The groundwater study will include an assessment of the potential for subsidence brought on by project-related water use in the area. The applicant will provide demonstration of compliance with all applicable laws and regulations and will obtain a County of San Diego Major Use Permit for use of any proposed well within the County's jurisdiction prior to construction.

Documentation of Purchased Water Source(s). For water that is to be purchased from one or more water/utility district(s), the applicant shall provide written documentation from such district(s) indicating the total amount of water to be provided and the timeframe that the water will be made available to the project. (For possible water district sources, refer to project-specific mitigation measures in the MMRP.)

Total confirmed water supplies from the combination of above documented sources shall equal the total gallons of water needed through construction of the project.

A water tank holding approximately 120,000 gallons of water would be maintained on the ECO Substation site for use during O&M. The water would primarily be used for temporary landscape irrigation, fire protection, and other standard facility uses. Monthly water use would range from 180 to 750 gallons of water, depending on the time of year and weather conditions. The water would be obtained from permitted municipal sources, groundwater sources, or a combination of

Attachment 2.
Water Balance Calculations

1.0 WATER BALANCE EVALUATION

The purpose of this attachment is to explain and present the water balance evaluation conducted for the 1462 acre watershed within the southeast portion of the Campo Indian Reservation. It is an update of the analysis presented in ENSI (2008) for a long-term water supply to support a proposed landfill project. In this case a long-term (indefinite) aquifer water balance was conducted and is presented as a conservative measure of the potential impact of short-term (2-year) pumping. Although the County of San Diego has no jurisdiction over land or groundwater use on the Reservation, *the County of San Diego's Groundwater Ordinance and Guidelines for Determining Significance – Groundwater Resources* were used as guidelines¹.

A summary of this analysis is provided in **Table 2** after Section 1.3.

1.1 Introduction

This analysis of the long-term available water supply compares groundwater withdrawal rates to the amount of groundwater remaining in storage after groundwater recharge is calculated for the aquifer system based on historical rainfall data. The analysis is based on a constant withdrawal rate. Many years the aquifer remains at or near full capacity since the long-term withdrawal rate is a relatively small percentage of the total volume of groundwater in storage and the average annual rainfall recharge rate is greater than the long-term withdrawal rate.

The extent of the aquifer for the water balance analysis (**Figures 2 and 4**, in summary report) is based on a surface water watershed surrounding a central wellfield.

1.2 Methodology

The long-term available groundwater supply is primarily limited by rainfall recharge rates and groundwater storage. The groundwater recharge rate is calculated for this analysis using a monthly soil moisture balance methodology. The groundwater storage is based on the interpretation of site-specific data. Incorporated into the analysis are historical precipitation data (1945 to 2012), evapotranspiration rates, soil moisture capacity, and surface water runoff rates.

Precipitation is either returned to the atmosphere as evapotranspiration, leaves as runoff, or enters the subsurface as recharge. During years when recharge significantly exceeds pumping, storage is exceeded and recharge is effectively rejected. Relative to the aquifer water balance, this 'excess recharge' is implicitly incorporated within the conventional water balance components of stream baseflow (surface discharges from the aquifer), and net groundwater outflow from the watershed- both of which will increase during years with high rainfall.

¹ Dated 3/19/2007 and available at: <http://www.sdcounty.ca.gov/pds/procguid.html#Groundwater>

Each of the water balance components are described in the following sections.

1.2.1 Groundwater Recharge

Groundwater recharge occurs across the entire watershed. The recharge rate is based on rainfall, runoff, and areally- averaged soil properties.

Groundwater extraction for the Project will be limited to the wellfield area shown in **Figures 2** and **4**, the water balance calculations reflect the concentration of pumping from the 1,462 acre watershed.

Rainfall. The historical rainfall record used for this analysis was obtained from the Campo weather station, a site that has been in operation since the 1800s. The period of record used in this analysis is between the years 1900 and 2013, with an emphasis on the years since 1945. The historical data from Campo, CA are shown in **Figure A.1**. It is a combination of data used by the DPLU to develop Figure 5, and rainfall data obtained for the Campo, CA from the Western Regional Climate Center (www.wrcc.dri.edu) for station number 041424. Review of the rainfall data shows that rainfall rates have generally decreased since the mid-1940s in the area. Because the water supply should be reliable under low rainfall conditions, the period of record since 1945 is viewed as the most critical for this evaluation.

The County of San Diego DPLU rainfall map provides contours depicting the average annual rainfall rates across the county and incorporates the effect of terrain and other factors to extrapolate the rainfall station data. **Figure A.2** shows the average annual rainfall for the Project area. Comparison of the Campo rainfall with the rainfall map (for 1971 to 2001) shows that the average Campo rainfall is 15.26 inches per year whereas the DPLU map indicates an average rainfall of approximately 15 to 18 inches per year. While the DPLU map suggests a higher effective rainfall rate could be used for the site, the Campo rainfall data have not been adjusted (i.e. increased) and are conservatively used without revision for this analysis.

Evapotranspiration. The evapotranspiration rate is the rate that plants and soil lose water to the atmosphere by normal plant respiration and soil drying. Climatic parameters such as temperature, cloud cover, and wind strongly affect hydrologic conditions. The overall effect of these parameters can be seen in the rate of evaporation and plant transpiration (termed evapotranspiration, or ET). The ET rate used in this study is based on a state-wide monitoring system known as CIMIS (www.cimis.water.ca.gov). The California Irrigation Management Information System (CIMIS) is a program in the Office of Water Use Efficiency (OWUE), California Department of Water Resources (DWR) that manages a network of over 120 automated weather stations in the state of California. CIMIS was developed in 1982 by the California Department of Water Resource and the University of California at Davis to assist California's irrigators to manage their water resources efficiently. The ET data published by CIMIS for Zone 16 were used in this report. The annual reference ET rate for Zone 16 is 62.51 inches/yr. For example, based on the reference ET rate, an irrigated turf will require over 5 Acft of water per acre per year.

Soil Types and Soil Moisture Capacity. The soils within the watershed have been mapped on an aerial photograph and classified by the US Department of Agriculture as shown in **Figure 3** in the summary report. The areas for each soil type in the watershed were calculated using the mapping software provided by the USDA on their website (<http://websoilsurvey.nrcs.usda.gov>). The hillsides of the watershed are predominantly LcE2, La Posta rocky loamy coarse sand, with a relatively low water retention and soil moisture capacity. The soils within the central drainage are mapped as MvD, Mottsville loamy coarse sand. **Table 1**, below, summarizes the acreage of each of the soil types in the watershed together with the typical soil thicknesses and the soil moisture capacity for each soil type. A calculation of the average soil moisture capacity was done based on the reported soil types. A soil moisture capacity of 2.4 inches is judged to be a reasonable value for soils in the watershed.

Table 1. Soil Moisture Capacity for Soils in Watershed									
Data source: Natural Resources Conservation Service (http://websoilsurvey.nrcs.usda.gov)									
	Acreage	pct	Drainage Class	Hydrologic Soil Group	SM Cap. (in./in.)	Max. Soil Thickness (in.)	Calculated SM Cap (in.)	Water Capacity (in.)	
Upland/ Tributary Areas									
KcC Kitchen Creek loamy coarse sand, 5 to 9 percent slopes	289.4	19.8%	SED	B	0.07	54	3.78	4.90	
LaE2 La Posta loamy coarse sand, 5 to 30 percent slopes, eroded	19.7	1.3%	SED	B	0.06	29	1.74	1.80	
LcE2 La Posta rocky loamy coarse sand, 5 to 30 percent slopes, eroded	908.5	62.1%	SED	B	0.06	27	1.62	1.70	
ToE2 Tollhouse rocky coarse sandy loam, 5 to 30 percent slopes, eroded	9.8	0.7%	SED	D	0.11	16	1.76	1.80	
ToG Tollhouse rocky coarse sandy loam, 30 to 65 percent slopes	114.9	7.9%	SED	D	0.11	16	1.76	1.80	
	1342.3	92%				weighted avg:	2.10	2.40	
Drainage Channel									
MvD Mottsville loamy coarse sand, 9 to 15 percent slopes	119.7	8.2%	ExD	A	0.07	60	4.20	4.20	
	119.7	8.2%				weighted avg:	4.20	4.20	
	1462.0	100%				overall weighted avg:	2.27	2.55	
						midpoint:	2.4		
Drainage Classes: Excessively Drained (ExD)/ Somewhat Excessively Drained (SED) / Well-drained/ Moderately Well Drained Somewhat Poorly Drained (SPD), Poorly Drained, Very Poorly Drained									
Hydrologic soil groups are based on estimates of runoff potential.									
Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.									
The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:									
Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet.									
These consist mainly of deep, well drained to excessively drained sands or gravelly sands.									
These soils have a high rate of water transmission.									
Group B. Soils having a moderate infiltration rate when thoroughly wet.									
These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture.									
These soils have a moderate rate of water transmission.									
Group C. Soils having a slow infiltration rate when thoroughly wet.									
These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture.									
These soils have a slow rate of water transmission.									
Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet.									
These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.									

Soil Moisture Balance Recharge Calculations. A soil moisture balance methodology is used in this Report to determine the rate of groundwater recharge. The overall water balance is determined on a monthly basis using historical rainfall data. Each month that rainfall occurs, recharge will occur if the amount of rainfall exceeds the soil moisture capacity, water lost to surface water runoff, and the amount of water consumed by plants and lost to evaporation and plant transpiration (termed potential evapotranspiration, or pET). Note that the pET rate in this case primarily accounts for evaporation from soil since non-irrigated native plants tend to have very low ET rates.

The soil moisture balance equation written in terms of recharge for month i is given by:

$$Recharge_i = ppt_i - runoff_i - pET_i - (SM_i - SM_{i-1})$$

where:

ppt_i , is the rainfall in month i

pET_i , is the potential evapotranspiration rate in month i

SM_i , is the soil moisture in month i and previous month $i-1$

$runoff_i$, is the surface water runoff in month i as given by:

$$runoff_i = ppt_i * pct * (SM_{i-1}/SM_{cap})$$

where:

$runoff_i$, is the volume of runoff in month i

pct , the runoff coefficient,

is the assumed maximum percentage of rainfall runoff in month i

SM_i , is the soil moisture at the time of rainfall

(The antecedent moisture condition, previous month $i-1$)

SM_{cap} , is the soil moisture capacity for the soil, a constant

All values herein are expressed in inches. Volumes are calculated based upon the area of consideration. An Excel spreadsheet developed for these calculations is included at the end of this Attachment.

Recharge occurs when the precipitation exceeds runoff, evapotranspiration, and the soil moisture capacity. Water can be stored in the soil at an amount up to the soil moisture capacity. Each month the antecedent moisture condition is evaluated to determine if the soil moisture capacity has already been met. If the soil is already at the soil moisture capacity, and the next month's rainfall exceeds the amount of water 'lost' by evapotranspiration and runoff, recharge will be immediate. Runoff in the soil moisture balance is calculated as a function of the preceding month's soil moisture condition and is a maximum when the soil is saturated. Here a runoff coefficient value of 20 percent is used.

A long-term aquifer water balance is then calculated using the historical rainfall record based on the rate of recharge from the soil, the amount of water that can be stored in the aquifer, and the amount of water pumped from the aquifer on an annual basis. In any

given year the volume of water in the aquifer will vary depending on the relative recharge rate and groundwater demand. If there is no pumping demand, there is no change in groundwater storage. Years with recharge in excess of the aquifer storage and groundwater use lead to a condition where the excess recharge is rejected. Conversely, following periods of low rainfall, continued depletion of groundwater from storage occurs.

1.2.2 Groundwater in Storage

Groundwater occurs within the void space of the granitic rock that comprises the aquifer. Within unweathered crystalline rock the void space occurs solely within rock fractures. In decomposed granite (DG), the void space occurs in pore spaces created from the weathering of minerals as well as from rock fractures. Fracture zones in the DG are typically highly fractured and deeply weathered.

The groundwater storage capacity of the aquifer system is defined as the ratio of the volume of water released from the aquifer to the volume of aquifer containing the water when water is withdrawn from the aquifer under pumping conditions or as a result of a decrease in water levels. The storage coefficient of an unconfined aquifer is termed the specific yield; for a confined aquifer the value is termed the specific storage. The fractured rock aquifer system may occur under a mix of confined and unconfined conditions, depending upon the character and extent of fracturing within the rock. Here the term storage coefficient is used to define the amount of extractable water available within the aquifer.

Typically the storage capacity of unweathered crystalline rock is quite low and ranges between 0.1 and 0.01 percent of the rock volume. A value of 0.01 percent (storage coefficient, $S = 1 \times 10^{-4}$) is generally accepted for similar analyses of crystalline rock with low fracture density, increasing to 0.1 percent ($S = 1 \times 10^{-3}$) for highly fractured bedrock. Hydrologic test data obtained at the Project site, as summarized by Golder (2008), generally support a higher storage coefficient of 0.05 because the crystalline rock at the Project site is highly fractured and deeply weathered.

Weathered granite (DG) has a much higher storage capacity than unweathered granite due to the development of intergranular porosity via mineral weathering. The DG is an important element to the water balance and overall hydrology of this and similar watersheds. The hydraulic properties of DG were well-summarized by Davis and DeWiest (1966, p.320) where they note that “Effects of weathering may extend more than 300 feet in regions of intense weathering. Depths of weathering of 5 to 50 feet, however, are normally encountered. Hydrated minerals in weathered rock at the surface will form loose aggregates which have porosities in excess of 35 percent. The porosity decreases with depth to zones in which the original rock-forming minerals are only partly altered.” They further state that the overall porosity is on the order of 2 to 10 percent at depth.

A study by Tugrul (2004) examined in detail weathered rock, including granodiorite and tested the rock for both total and effective porosities, and showed that the effective

porosity (the porosity available for water flow) ranged from 3.5 to 9%. Extensive testing of slightly to moderately weathered Oracle granite conducted by Jones (1983) compared total porosity values measured from rock samples with downhole geophysical methods and determined that overall porosity ranged from 2 to 6%, with the highest porosity values corresponding to weathered/altered rock. A site-specific value of 6 to 8% was derived from a streamtube analysis of recharge and water level data for the landfill site provided in an unpublished 1997 BS Thesis by J.A. Crosby at San Diego State. Work done by the USGS in nearby Descanso (Duell, 1994) and Lee Valleys (Kaehler and Hsieh, 1994) for weathered rock within valleys indicated that specific yields of weathered rock under pumping conditions are on the order of 1 to 3%.

The storage coefficient values will locally vary across the site as a function of the degree of fracturing and weathering within the rock mass, so the values used herein represent volume averages. A storage coefficient of 5% (0.05) is used for DG, and an intermediate storage value of 0.05% (5×10^{-4}) is used for the underlying rock in this Report. A value of 5 percent is generally accepted for use in water supply studies locally reviewed and approved by the County of San Diego Department of Planning and Land Use.

Figure 4 (in report) summarizes the DG aquifer system evaluation in terms of the extent and thickness of saturated DG expected to occur in the watershed. The contour map is based on data used in groundwater model prepared by Golder (2008).

DG Storage (2,193 Acft) Based on analysis of **Figure 4** an average saturated thickness of 30 feet has been calculated. The 1,462 acre watershed area is calculated to contain 2,193 Acft of water based on an average 5% storage coefficient.

Bedrock Storage (366 Acft) The calculation of the amount of water in storage within the unweathered rock assumes an average saturated thickness of 500 feet, an area of 1,462 acres, and a storage coefficient of 0.05%. This evaluation assumes that wells up to 500 feet below the water table (or below the DG/bedrock interface where DG occurs) can be installed to provide groundwater from the underlying bedrock aquifer system. Wells drilled in excess of 1,000 feet in depth are increasingly becoming common in the area, so the assumed 500 foot saturated thickness for bedrock is conservative.

Combined Storage. The total volume of groundwater in storage is calculated to be 2,559 Acft.

1.2.3 Long-term Groundwater Availability

Estimates of the amount of groundwater recharge were conducted using an Excel spreadsheet that calculates the soil moisture balance (and recharge) on a monthly basis between July 1900 and June 2013 using the equations explained in Section 3.2.1. The analysis focuses on the period from 1945 to 2012. (The calculation methodology follows that used by a FORTRAN program named Recharge2, written by Dr. David Huntley of San Diego State University and generally accepted for similar projects by the DPLU). The Excel spreadsheet printouts are included at the end of this Attachment.

The basis for the analysis includes the following:

- 1) Historical rainfall data from the Campo, CA weather station and the DPLU rainfall map.
- 2) Evapotranspiration rates obtained from CIMIS (climate zone 16).
- 3) Estimates of the groundwater storage of the DG and underlying crystalline rock.
- 4) Soils data obtained from the US Department of Agriculture. An area-weighted average value of 2.4 inches is used for the soil moisture capacity in the water balance calculations (see **Table 1**).
- 5) A general description and field review of the watershed.

The following assumptions were made for the watershed:

- 1) No significant volumes of groundwater flow are discharged as surface water flow based on an absence of perennial surface water in the watershed.

The calculated change in groundwater storage is shown in **Figure 5** (in the summary report) based on a constant annual extraction rate of 173 Acft/yr. It is based on a 1,462-acre watershed with a total storage capacity of approximately 2,559 Acft. The chart depicts the effect of seasonal recharge and groundwater withdrawal on an annual basis. It shows that there are multiple periods of approximately 5 years or more where demand exceeded recharge and water is withdrawn from storage. “El Nino”-type rainfalls occurred with well-above average rainfall and provided for complete recovery of the aquifer system and are evident in the rainfall record (**Figure A.1**).

The following observations can be made for the period of record from 1945 to 2012:

- The average recharge rate, 230 AcFt/yr, exceeds the withdrawal rate of 173 AcFt/yr. Thus there are many years where the aquifer is fully recharged by rainfall and no decrease in groundwater storage occurs due to pumping on an annual basis.
- The effect of pumping increases for years where recharge does not offset groundwater use. During dry years water is derived from subsurface storage. On average the aquifer remains at 81.8 percent effect of capacity.

1.3 Discussion

The methodology used in this report represents one approach to the evaluation of groundwater recharge and storage and is the approach currently used by the County of San Diego DPLU to examine the potential impact of pumping on groundwater-dependent developments². It is based on readily-available locally-valid data such as precipitation, evapotranspiration, soil properties, and aquifer extent and thickness. It is recognized that the calculation parameters may vary from those presented herein; however, the overall approach was conservative to accommodate potential variability and uncertainty.

² See for example: <http://www.sdcounty.ca.gov/dplu/docs/GRWTR-Guidelines.pdf>
located in: <http://www.sdcounty.ca.gov/pds/procguid.html#Groundwater>

Table 2. Water Supply Summary

<u>Component</u>	
Watershed Area	1,462 acres
Proposed Wellfield	Centrally located- see Figure 2 in text
Groundwater Storage, Acft (1062 acre sub-area)	2,559 Acft total: 2,193 in Decomposed Granite (avg. saturated thickness of 30 feet) 366 from bedrock (avg. saturated thickness of 500 feet)
Rainfall, 1945 to 2012 (Campo, CA)	14.58 inches/yr 1,776 Acft/yr in watershed
Soil Moisture Capacity	2.4 inches (Table 1)
Rainfall Recharge Rate, Avg Annual	230 Acft/yr 8.74% of annual rainfall
Maximum Pumping Rate, not exceeding 50% of storage	173 Acft/yr
Years with no net Groundwater Depletion	19 of 66 years (29%)
Annual Maximum Pumping Rate, as percentage of Annual Recharge	75%
Annual Maximum Pumping Rate, as percentage of Annual Rainfall	9.7%
Annual Maximum Pumping Rate, as percentage of Groundwater Storage	6.8%
Current estimated demand within the watershed. 12 residences with assumed use of 0.5 Acft/yr	6 Acft/yr

2.0 REFERENCES

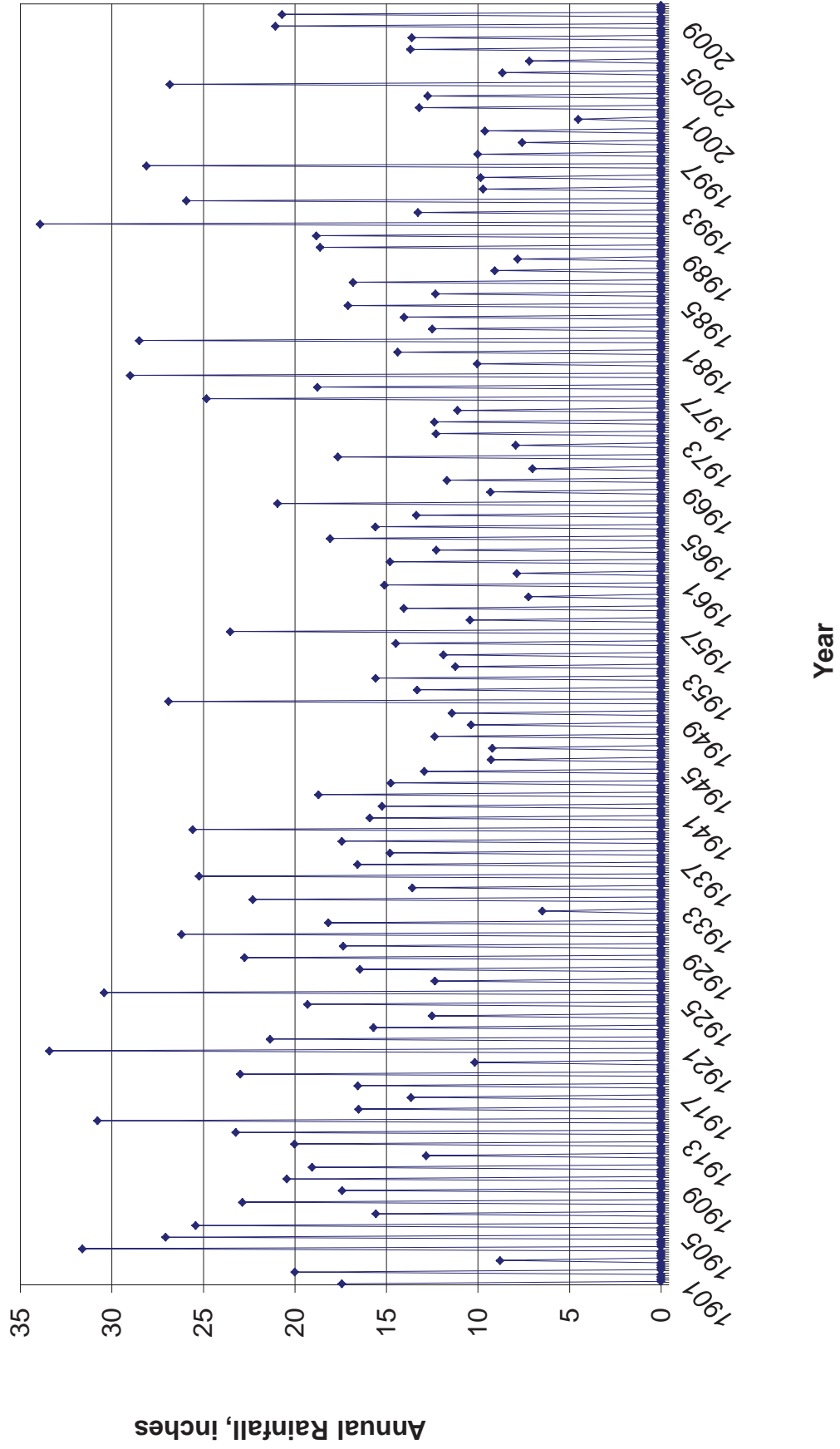
- Abbott, D.W., 2007. *Fractured Rock Aquifers- Positive Correlation between Well Depths and Estimated Hydraulic Conductivity*. Groundwater Resources Association of California Winter 2007 Hydrovisions [v16, no.4, p.4 and 5] (http://www.grac.org/Winter_2007.pdf)
- Davis, S.N., and R DeWiest, 1966. *Hydrogeology*. J. Wiley Pub.
- DPLU, 2004. Groundwater Limitations Map (http://www.co.sandiego.ca.us/dplu/Resource/docs/3~pdf/precip030104_small.pdf)
- Duell, L.F., Jr., 1994, Water resources of the Descanso Area, San Diego County, California: U.S. Geological Survey Water-Resources Investigations Report 90-4014, 26 pages.
- Ellis and Lee, 1919. Geology and ground waters of the western part of San Diego County, CA. USGS Water Supply Paper 446. 321 p.
- Golder, 2008. Proposed landfill hydrogeology report in process for BLT, Inc.
- Jones, J.W. 1983. Structural, Hydraulic, and Geophysical Properties of Granite near Oracle, Arizona. MS Thesis. University of Arizona. Content also available in Jones, J.W, E.S. Simpson, S.P. Neuman, and W.S. Keys. Field and Theoretical investigations of Fractured Crystalline Rock near Oracle, Arizona. US Nuclear Regulatory Commission Report NUREG/CR-3736, 1985.
- Kaehler, C.A., and Hsieh, P.A., 1994, Hydraulic properties of a fractured-rock aquifer, Lee Valley, San Diego County, California: U.S. Geological Survey Water Supply Paper 2394, 64 p.
- Moyle, W.R., Jr., and Downing, D.J., 1978, Summary of water resources for the Campo, Cuyapaipe, La Posta, and Manzanita Indian reservations and vicinity, San Diego County, California: U.S. Geological Survey Open File Report 77-684, 39 p
- Olmsted, F.H., 1953, Geologic features and water resources of Campo, Mesa Grande, and La Jolla reservations (Calif.): U.S. Geological Survey Open-File Report 53-201, 103 p.
- Singhal B.B.S, and R.P. Gupta, 1999. *Applied Hydrogeology of Fractured Rocks*. Kluwer Academic Pub.
- Tugrul, A., 2004. The effect of weathering on pore geometry and compressive strength of selected rock types from Turkey. *Engineering Geology* 75, p 215-227.
- SAIC, 2008. Supplemental Environmental Impact Study for the Proposed Campo Landfill, Campo Indian Reservation, CA

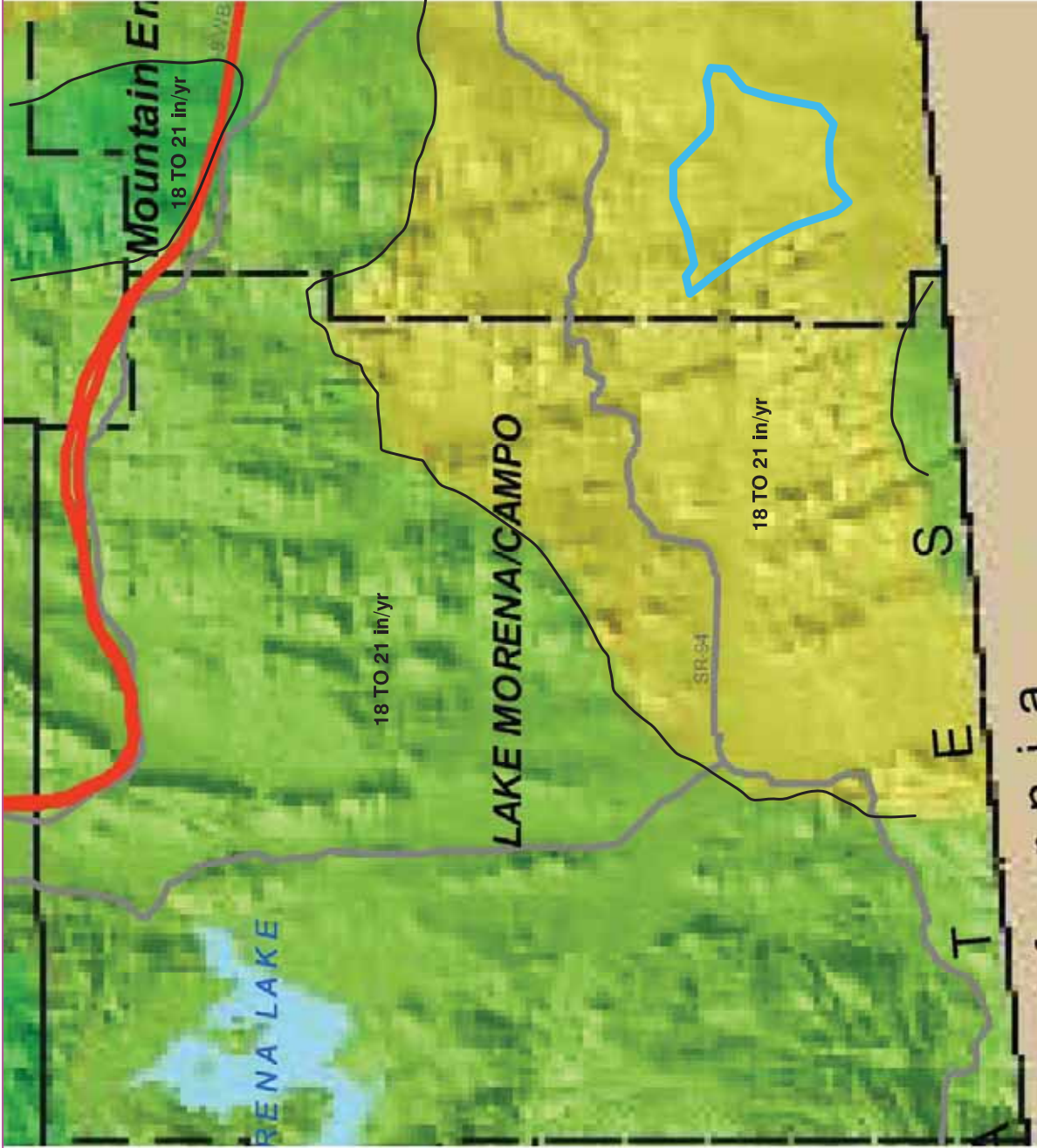
3.0 LIMITATIONS

This report evaluates changes in aquifer conditions related to the Project's groundwater demands. The evaluation uses a water balance methodology currently accepted by the County of San Diego Department of Planning and Land Use for groundwater-dependent projects, and also evaluates potential water level changes due to pumping. These estimates, similar to all geologic and hydrologic measurements, are subject to uncertainty. Water level observations and ongoing hydrological analyses during pumping are required as part of the mitigation monitoring program to more precisely assess the potential impact of groundwater pumping at the site.

This report does not guarantee, either explicitly or implicitly, that existing or future water wells installed for the Project will provide sufficient quantity and quality of water. Groundwater naturally high in total dissolved solids, radionuclides, or minerals such as arsenic, iron, and sulfate occurs in granitic terrain and ongoing water quality testing is required to assess the water obtained from the wellfield. Also, the results and findings of this report are limited to historical conditions and do not preclude the potential for drought conditions in excess of those observed between 1900 and 2012.

Figure A.1
Annual Rainfall at Campo, CA
(WRCC Station 1424)





**ANNUAL RAINFALL AT
SITE FROM DPLU, 2004**

Campo Indian Reservation
San Diego County, California

PE/PG	JWJ	Project Number	SECWS	Figure
Project Manager	JWJ	Drafter	CM	Date
				06/13/2013

A.2

EXPLANATION BLOCK

Environmental
Navigation
Services, Inc.

NOT TO SCALE

RECHARGE CALCULATIONS: Soil Moisture Balance

ver. June11, 2013

Proposed Short-term Water Supply, SE Campo Indian Reservation

Rainfall Statistics (inches/yr)			
maximum	33.9	(1992-1993)	
minimum	4.5	(2001-2002)	
average	16.4	14.58	...total and since 1945
st dev	6.6	6.3	...total and since 1945
30 year avg (1971 to 2001) 15.3			
DPLU Map Rainfall (15 to 18 in/yr) 16.5 avg			
Difference (increase) 1.08			
Adjustment Factor 1.00 (rf)			

Soil Parameters	
2.4	Soil Moisture Capacity, smcap
0.2	Runoff Coefficient, roff

Indicates Input Variables

Campo Evaporation and pET													total
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	
CIMIS 16: ET rate	9.30	8.37	6.30	4.34	2.40	1.55	1.55	2.52	4.03	5.70	7.75	8.70	62.51
CIMIS 9	7.44	6.82	5.70	4.03	2.70	1.86	2.17	2.80	4.03	5.10	5.89	6.60	55.14
CIMIS 16	9.30	8.37	6.30	4.34	2.40	1.55	1.55	2.52	4.03	5.70	7.75	8.70	62.51
Lake Morena Evap.	8.82	6.39	2.39	2.29	2.80	6.29	2.20	1.70	2.40	4.40	6.10	7.30	53.07

WATER YEAR ending	Campo Rainfall: 1900- 2012 (water years, July to June)												Annual RF Total	Annual Runoff & Recharge (inches)	by pct.		
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June					
1901	0.61	0.63	0.00	1.02	0.43	0.23	4.28	4.72	4.00	1.33	0.07	0.12	17.44	2.01	12%	runoff	
Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.80	0.26	0.00	0.00		2.01			
Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	2.37	0.00	0.00	0.00					
Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.33	1.26	0.00	0.00	0.00	0.00		1.59	9%	recharge	
1902	2.24	0.00	0.00	0.03	2.27	3.04	1.85	4.93	2.30	3.23	0.11	0.00	20.00	1.61	20.00	8%	runoff
Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.74	0.46	0.18	0.00	0.00		1.61			
Soil Mo.	0.00	0.00	0.00	0.00	0.00	1.49	1.79	2.40	0.67	0.00	0.00	0.00					
Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	0.00	0.00	0.00	0.00		1.06	5%	recharge	
1903	0.00	0.00	0.47	0.03	0.00	0.00	0.41	2.68	4.19	0.49	0.52	0.00	8.79	0.07	8.79	1%	runoff
Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.00	0.00		0.07			
Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.32	0.00	0.00	0.00					
Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0%	recharge	
1904	0.85	1.59	0.64	0.13	0.00	1.82	4.32	11.94	6.87	0.92	2.53	0.00	31.61	4.04	31.61	13%	runoff
Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.10	2.39	1.37	0.18	0.00	0.00		4.04			
Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.27	2.40	2.40	2.40	0.00	0.00	0.00					
Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.54	7.03	1.47	0.00	0.00	0.00		9.04	29%	recharge	
1905	0.00	0.25	0.68	0.00	5.85	1.12	2.98	3.69	10.20	1.60	0.70	0.00	27.07	3.81	27.07	14%	runoff
Runoff	0.00	0.00	0.00	0.00	0.00	0.22	0.49	0.74	2.04	0.32	0.00	0.00		3.81			
Soil Mo.	0.00	0.00	0.00	0.00	2.40	1.97	2.40	2.40	2.40	0.00	0.00	0.00					
Recharge	0.00	0.00	0.00	0.00	1.05	0.00	0.51	0.43	4.13	0.00	0.00	0.00		6.12	23%	recharge	
1906	0.18	2.12	0.90	0.10	3.23	7.15	5.24	1.67	3.91	0.25	0.41	0.26	25.42	2.41	25.42	9%	runoff
Runoff	0.00	0.00	0.00	0.00	0.00	0.49	1.05	0.33	0.51	0.03	0.00	0.00		2.41			
Soil Mo.	0.00	0.00	0.00	0.00	0.83	2.40	2.40	1.55	1.43	0.00	0.00	0.00					
Recharge	0.00	0.00	0.00	0.00	0.00	3.54	2.64	0.00	0.00	0.00	0.00	0.00		6.18	24%	recharge	
1907	0.00	0.00	0.00	2.46	0.25	0.12	4.21	4.90	1.91	0.71	1.01	0.00	15.57	1.38	15.57	9%	runoff
Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.38	0.02	0.00	0.00		1.38			
Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	2.40	2.40	0.28	0.00	0.00	0.00					
Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.26	1.40	0.00	0.00	0.00	0.00		1.66	11%	recharge	

1908		0.26	0.00	0.40	1.72	0.77	1.83	8.41	5.43	4.05	0.00	0.00	0.00	22.87	22.87		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.20	1.09	0.81	0.00	0.00	0.00		2.09	9%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.28	2.40	2.40	2.40	0.00	0.00	0.00				
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	4.54	1.82	0.00	0.00	0.00	0.00	6.37	28%	recharge	
1909		0.00	0.00	0.00	0.00	3.44	5.82	4.93	0.66	2.25	0.32	0.00	0.00	17.42	17.42		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.50	0.99	0.13	0.10	0.00	0.00	0.00		1.72	10%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	1.04	2.40	2.40	0.54	0.00	0.00	0.00	0.00			63%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	2.41	2.39	0.00	0.00	0.00	0.00	0.00	4.80	28%	recharge	
1910		3.44	0.05	1.94	1.03	1.12	0.15	4.65	5.70	1.40	0.96	0.00	0.00	20.44	20.44		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.14	0.28	0.00	0.00	0.00		1.42	7%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	2.40	2.40	0.00	0.00	0.00	0.00			80%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.70	2.04	0.00	0.00	0.00	0.00	2.74	13%	recharge	
1911		0.40	0.00	0.00	0.00	0.10	2.08	0.64	0.00	10.67	3.51	1.52	0.15	19.07	19.07		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.70	0.03	0.00		0.76	4%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00	2.40	0.21	0.00	0.00			74%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.24	0.00	0.00	0.00	4.24	22%	recharge	
1912		0.15	0.20	0.00	0.98	0.92	0.00	2.75	5.27	1.90	0.33	0.13	0.20	12.83	12.83		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.38	0.01	0.00	0.00		0.91	7%	runoff
1913		0.36	1.77	0.00	0.05	2.39	1.49	5.85	4.07	0.92	2.34	0.78	0.00	20.02	20.02		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.18	0.00	0.00	0.00		1.00	5%	runoff
	SM param	-8.94	-6.60	-6.30	-4.29	-0.01	-0.06	4.30	3.95	-0.71	-3.36	-6.97	-8.70				
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	1.90	0.74	0.00	0.00	0.00	0.00	2.64	13%	recharge	
1914		0.75	0.00	0.22	0.88	0.76	3.99	6.36	4.47	1.74	1.50	2.56	0.00	23.23	23.23		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.89	0.35	0.01	0.00	0.00		2.53	11%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	2.40	2.40	2.40	0.11	0.00	0.00	0.00			69%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.04	3.54	1.06	0.00	0.00	0.00	0.00	4.63	20%	recharge	
1915		0.50	0.35	0.00	0.00	1.20	3.40	20.44	0.90	3.81	0.19	0.00	0.00	30.79	30.79		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	3.15	0.18	0.25	0.01	0.00	0.00		3.59	12%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	1.85	2.40	0.78	0.56	0.00	0.00	0.00			39%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	15.19	0.00	0.00	0.00	0.00	0.00	15.19	49%	recharge	

1916		0.18	0.85	0.43	0.85	0.00	2.32	4.85	2.88	0.80	2.79	0.57	0.00	16.52	16.52		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.58	0.16	0.00	0.00	0.00	1.05	1.05	6%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.77	2.40	2.40	0.00	0.00	0.00	0.00	1.36	1.36	85%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	1.36	0.00	0.00	0.00	0.00	0.00	1.36	1.36	8%	recharge
1917		0.93	0.00	0.03	0.00	0.35	0.00	1.62	2.73	7.55	0.00	0.25	0.20	13.66	13.66		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.18	0.00	0.00	0.00	0.19	0.19	1%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.28	2.40	0.00	0.00	0.00	1.22	1.22	90%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.00	1.22	1.22	9%	recharge
1918		0.10	2.17	0.00	1.10	1.89	2.19	0.75	4.04	3.07	1.08	0.17	0.00	16.56	16.56		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.39	0.05	0.00	0.00	0.48	0.48	3%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.64	0.00	1.52	0.56	0.00	0.00	0.00	0.00	0.00	97%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	recharge
1919		0.57	0.15	0.20	1.20	3.66	1.01	1.90	7.44	5.84	0.66	0.35	0.00	22.98	22.98		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.11	0.11	0.66	1.17	0.13	0.00	0.00	2.18	2.18	10%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	1.26	0.72	1.07	2.40	2.40	0.00	0.00	0.00	3.57	3.57	75%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.93	0.64	0.00	0.00	0.00	3.57	3.57	16%	recharge
1920		0.00	1.00	0.15	1.10	0.12	0.79	2.90	0.51	0.95	0.15	2.50	0.00	10.17	10.17		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.06	0.06	1%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	1.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	recharge
1921		5.30	0.60	0.35	2.12	0.38	11.85	4.55	3.54	2.84	1.03	0.85	0.00	33.41	33.41		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.71	0.57	0.10	0.00	0.00	2.29	2.29	7%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	2.40	2.40	2.40	1.21	0.00	0.00	0.00	10.30	10.30	62%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	7.90	2.09	0.31	0.00	0.00	0.00	0.00	10.30	10.30	31%	recharge
1922		7.10	1.32	0.25	0.53	1.65	3.39	1.40	1.96	1.68	1.93	0.00	0.15	21.36	21.36		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.28	0.16	0.00	0.00	0.00	0.65	0.65	3%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	1.84	1.69	1.13	0.00	0.00	0.00	0.00	0.00	0.00	97%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	recharge
1923		1.35	0.62	1.60	1.10	0.05	3.29	0.35	0.00	5.47	1.88	0.00	0.00	15.71	15.71		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.23	0.00	0.00	0.28	0.28	2%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	1.74	0.54	0.00	1.44	0.00	0.00	0.00	0.00	0.00	98%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	recharge
1924		0.00	0.00	0.00	0.50	1.50	3.17	0.36	0.41	1.96	3.78	0.00	0.83	12.51	12.51		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.06	0.06	1%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	1.62	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	recharge
1925		0.31	0.00	0.00	2.88	2.29	1.06	1.50	2.00	0.35	8.92	0.00	0.00	19.31	19.31		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.00	0.00	0.82	0.82	96%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.00	0.00	0.82	0.82	4%	recharge
1926		0.00	0.07	0.00	0.00	1.25	4.62	1.00	16.50	4.20	1.26	1.31	0.21	30.42	30.42		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.20	2.54	0.84	0.25	0.00	0.00	3.84	3.84	13%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	2.40	1.85	2.40	2.40	0.00	0.00	0.00	11.56	11.56	49%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.67	0.00	10.89	0.00	0.00	0.00	0.00	11.56	11.56	38%	recharge
1927		0.00	0.52	0.00	2.43	0.00	4.00	0.96	2.48	1.26	0.28	0.42	0.00	12.35	12.35		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.37	0.19	0.00	0.00	0.00	0.75	0.75	6%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	2.40	1.81	1.77	0.00	0.00	0.00	0.00	0.05	0.05	94%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0%	recharge
1928		0.00	0.00	0.00	0.33	1.10	2.94	3.19	3.95	2.95	1.99	0.00	0.00	16.45	16.45		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.79	0.59	0.22	0.00	0.00	1.97	1.97	12%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	1.39	2.40	2.40	1.32	0.00	0.00	0.00	0.90	0.90	83%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.64	0.00	0.00	0.00	0.00	0.90	0.90	5%	recharge
1929		0.00	3.23	0.52	0.00	0.00	0.00	8.26	1.23	4.04	0.62	4.85	0.00	22.75	22.75		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.37	0.06	0.00	0.00	0.68	0.68	3%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	2.40	1.11	1.12	0.00	0.00	0.00	4.31	4.31	78%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	4.31	0.00	0.00	0.00	0.00	0.00	4.31	4.31	19%	recharge
1930		1.12	0.00	0.35	0.00	3.45	0.00	3.18	5.86	0.40	2.51	0.49	0.00	17.36	17.36		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.08	0.00	0.00	0.00	0.88	0.88	5%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	1.05	0.00	1.63	2.40	0.00	0.00	0.00	0.00	1.77	1.77	85%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.77	0.00	0.00	0.00	0.00	1.77	1.77	10%	recharge
1931		0.00	0.00	0.00	0.81	3.93	6.21	1.70	11.73	0.34	1.38	0.00	0.10	26.20	26.20		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.79	0.34	2.35	0.07	0.00	0.00	0.00	3.55	3.55	14%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	1.53	2.40	2.40	2.40	0.00	0.00	0.00	0.00	9.86	9.86	49%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	3.00	0.00	6.86	0.00	0.00	0.00	0.00	9.86	9.86	38%	recharge
1932		0.00	0.00	0.00	0.50	0.00	6.91	6.20	0.00	0.00	2.98	1.44	0.14	18.17	18.17		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.00	0.00	0.00	1.24	1.24	7%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	2.40	2.40	0.00	0.00	0.00	0.00	0.00	6.37	6.37	58%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	2.96	3.41	0.00	0.00	0.00	0.00	0.00	6.37	6.37	35%	recharge
1933		0.00	0.00	0.00	0.00	0.98	1.80	0.00	2.23	0.54	0.00	0.04	0.90	6.49	6.49		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00												

1937		0.60	0.00	0.00	0.00	0.00	0.00	1.68	1.95	4.79	6.32	1.08	0.16	0.00	16.58	16.58		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.21	1.26	0.22	0.00	0.00		1.71	10%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.53	2.40	2.40	0.00	0.00	0.00			82%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	1.03	0.00	0.00	0.00		1.21	7%	recharge
1938		0.03	0.12	0.00	0.12	0.09	5.54	2.90	3.42	1.85	0.73	0.01	0.00		14.81	14.81		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.68	0.37	0.01	0.00	0.00			1.65	11%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	2.40	2.40	2.40	0.22	0.00	0.00	0.00				71%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	1.59	0.77	0.22	0.00	0.00	0.00	0.00			2.58	17%	recharge
1939		0.00	0.35	5.30	0.44	0.71	0.68	2.49	4.22	0.31	2.72	0.21	0.00		17.43	17.43		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.06	0.00	0.00	0.00			0.39	2%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	0.94	2.40	0.00	0.00	0.00	0.00				98%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0%	recharge
1940		0.00	0.00	0.22	1.55	0.69	6.81	1.29	3.62	5.65	5.00	0.73	0.02		25.58	25.58		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.65	1.13	1.00	0.10	0.00			3.14	12%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	2.40	2.14	2.40	2.40	1.70	0.00	0.00				74%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	2.86	0.00	0.19	0.49	0.00	0.00	0.00			3.54	14%	recharge
1941		0.10	0.95	0.05	3.22	0.81	3.04	1.40	2.58	2.04	1.70	0.02	0.00		15.91	15.91		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.29	0.24	0.00	0.00	0.00			0.70	4%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	1.49	1.34	1.40	0.00	0.00	0.00	0.00				96%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0%	recharge
1942		0.00	0.00	0.00	0.46	0.13	1.56	5.85	1.95	2.79	2.43	0.00	0.08		15.25	15.25		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.43	0.12	0.00	0.00			0.94	6%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.01	2.40	1.83	0.59	0.00	0.00	0.00				81%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	1.91	0.00	0.00	0.00	0.00	0.00			1.91	12%	recharge
1943		0.00	0.30	0.00	0.61	0.00	4.99	1.67	8.11	1.40	1.11	0.45	0.08		18.72	18.72		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.33	1.62	0.28	0.00	0.00	0.00			2.24	12%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	2.40	2.40	2.40	0.00	0.00	0.00	0.00				61%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	1.04	0.00	3.97	0.00	0.00	0.00	0.00			5.01	27%	recharge
1944		0.00	0.01	0.05	0.00	5.43	0.89	0.79	1.73	5.23	0.55	0.03	0.05		14.76	14.76		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.18	0.11	0.14	0.08	0.06	0.00	0.00			0.58	4%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	2.40	1.74	0.98	0.19	1.39	0.00	0.00	0.00				92%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.63	4%	recharge
1945		0.10	1.80	0.05	0.14	0.25	5.91	0.96	1.01	2.18	0.50	0.04	0.00		12.94	12.94		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.15	0.05	0.00	0.00	0.00			0.40	3%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	2.40	1.81	0.30	0.00	0.00	0.00	0.00				82%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	1.96	0.00	0.00	0.00	0.00	0.00	0.00			1.96	15%	recharge
1946		0.83	0.05	0.14	1.45	3.30	1.91	0.46	0.32	0.42	0.40	0.01	0.00		9.29	9.29		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.14	0.05	0.00	0.00	0.00	0.00	0.00			0.20	2%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.90	1.26	0.17	0.00	0.00	0.00	0.00	0.00				98%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0%	recharge
1947		0.00	0.36	0.13	0.46	0.66	2.79	0.07	1.96	2.32	0.21	0.06	0.20		9.22	9.22		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00			0.01	0%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.00	0.00	0.00	0.00				100%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0%	recharge
1948		0.00	0.00	0.22	1.10	0.00	2.56	4.33	2.24	1.39	0.11	0.41	0.00		12.36	12.36		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.45	0.25	0.00	0.00	0.00			1.06	9%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	1.01	2.40	2.12	0.00	0.00	0.00	0.00				83%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.00	0.00	0.00	0.00	0.00			1.03	8%	recharge
1949		0.00	0.00	0.00	0.77	1.09	2.42	2.74	1.19	1.68	0.48	0.01	0.00		10.38	10.38		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20	0.10	0.00	0.00	0.00			0.51	5%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.87	2.06	0.73	0.00	0.00	0.00	0.00				95%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0%	recharge
1950		0.10	0.00	0.22	0.00	0.41	0.34	4.00	1.39	1.12	3.57	0.27	0.00		11.42	11.42		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.12	0.00	0.00	0.00			0.40	3%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	2.40	1.27	0.00	0.00	0.00	0.00				96%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00			0.05	0%	recharge
1951		0.44	1.34	0.01	1.09	0.82	7.19	5.05	0.95	8.40	1.62	0.00	0.00		26.91	26.91		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.19	0.58	0.32	0.00	0.00			2.11	8%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	2.40	2.40	0.83	2.40	0.00	0.00	0.00				63%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	3.24	2.49	0.00	2.22	0.00	0.00	0.00			7.95	30%	recharge
1952		1.24	0.00	0.00	0.00	2.85	3.13	1.04	1.05	2.28	1.24	0.49	0.01		13.33	13.33		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.12	0.18	0.13	0.01	0.00	0.00	0.00			0.44	3%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.45	2.03	1.52	0.05	0.00	0.00	0.00	0.00				97%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0%	recharge
1953		0.04	0.01	0.00	0.00	1.14	0.18	4.89	2.49	6.45	0.16	0.18	0.05		15.59	15.59		
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	1.27	0.03	0.00	0.00			1.80	12%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	2.40	2.37	2.40	0.00	0.00	0.00				75%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.00	1.12	0.00	0.00	0.00			2.06	13%	recharge
1954		1.42	0.03	0.13	0.00	0.68	0.75	3.85	1.23	0.68	0.52	1.95						

2000		0.00	0.13	0.30	0.65	0.39	0.04	2.49	3.28	1.36	0.97	0.01	0.00	9.62		9.62	
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.19	0.00	0.00	0.00		0.45	5%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	0.94	1.70	0.00	0.00	0.00	0.00			95%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0%	recharge
2001		0.12	0	0.24	0	1.11	1.02	0.4	0.12	1.12	0.39	0	0	4.52		4.52	
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	100%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0%	recharge
2002		0.19	0	1.16	0.03	1.04	1.86	0.18	4.09	2.2	1.55	0.91	0	13.21		13.21	
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00		0.29	2%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.31	0.00	1.57	0.00	0.00	0.00	0.00		0.00	98%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0%	recharge
2003		1.93	1.49	0.38	0	0.55	1.26	0.68	4.45	0.66	1.34	0	0	12.74		12.74	
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00		0.11	1%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.93	0.00	0.00	0.00	0.00		0.00	99%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0%	recharge
2004		0.14	0.01	0	8.59	1.08	4.74	5.17	4.89	1.6	0.58	0.04	0	26.84		26.84	
	Runoff	0.00	0.00	0.00	0.00	0.22	0.43	1.03	0.98	0.32	0.00	0.00	0.00		2.97	11%	runoff
	Soil Mo.	0.00	0.00	0.00	2.40	1.08	2.40	2.40	2.40	0.00	0.00	0.00	0.00		0.00	62%	ET bal
	Recharge	0.00	0.00	0.00	1.85	0.00	1.44	2.59	1.39	0.00	0.00	0.00	0.00		7.27	27%	recharge
2005		0.47	2.53	0.01	0.62	0.11	0	0.99	1.3	0	2.25	0.22	0.16	8.66		8.66	
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	100%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0%	recharge
2006		0.52	0.03	0.07	0.36	0.17	1.19	0.75	3.08	0.22	0.77	0.04	0	7.20		7.20	
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00		0.01	0%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.00		0.00	100%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0%	recharge
2007		0.18	0	0	0.17	0.32	2.68	7.29	2.45	0.38	0	0.22	0	13.69		13.69	
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.49	0.07	0.00	0.00	0.00		1.25	9%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	1.13	2.40	2.33	0.00	0.00	0.00	0.00		0.00	63%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	3.78	0.00	0.00	0.00	0.00	0.00		3.78	28%	recharge
2008		0	1.35	0	0	1.8	6.2	0.2	3.7	0.09	0.24	0	0.03	13.61		13.61	
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.32	0.02	0.00	0.00	0.00		0.38	3%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	2.40	1.05	2.23	0.00	0.00	0.00	0.00		0.00	81%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00	0.00		2.25	17%	recharge
2009		0	0	0.03	0.03	0.7	4.86	6.6	5.13	1.37	2.35	0	0	21.07		21.07	
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	1.32	1.03	0.27	0.00	0.00	0.00		2.62	12%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	2.40	2.40	2.40	0.00	0.00	0.00	0.00		0.00	58%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.91	3.73	1.58	0.00	0.00	0.00	0.00		6.22	30%	recharge
2010		0.07	0	0.08	3.22	1.19	8.22	0.24	4.93	1.64	0.39	0.72	0	20.70		20.70	
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.45	0.33	0.00	0.00	0.00		0.82	4%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	2.40	1.09	2.40	0.01	0.00	0.00	0.00		0.00	72%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	4.27	0.00	0.65	0.00	0.00	0.00	0.00		4.92	24%	recharge
2011		0.22	1.28	0.22	0.64	3.39	1.62	0.73	2.01	2.88	2.85	0	0	15.84		15.84	
	Runoff	0.00	0.00	0.00	0.00	0.00	0.13	0.06	0.04	0.00	0.00	0.00	0.00		0.24	2%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.99	1.06	0.24	0.00	0.00	0.00	0.00	0.00		0.00	98%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0%	recharge
2012		0.39	0.67	0.59	0.37	0.59	2.74	2.28	1.52	1.78	0	0	0	10.93		10.93	
	Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.24	0.14	0.00	0.00	0.00		0.61	6%	runoff
	Soil Mo.	0.00	0.00	0.00	0.00	0.00	1.19	1.92	0.92	0.00	0.00	0.00	0.00		0.00	94%	ET bal
	Recharge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0%	recharge

0 RF data missing (calculations underestimate total)

RECHARGE CALCULATIONS: Annual Recharge, Aquifer Storage, and Groundwater Use

SM capacity	2.40	inches	input variables	
runoff coeff.	0.20	%	20.00	%
storage DG	0.05		5.00	percent effective porosity
DG aq area	1462.00	acres		
storage frx	0.0005		0.05	percent effective porosity (500 ft deep)
WS aq area	1462.00	acres		
DG sat_depth	30.00	feet	14.58	Avg Rainfall, inches
Eff. capacity	1279.25	Available Ac-ft (50% allowed)	1777	Avg Rainfall, Acft
pumping rate	173.00	Ac-ft/yr	107	in gpm (24 hr/day)
			154,434	gallons per day
			9.7%	Pumping, as % of rainfall

lowest remaining aquifer vol	4	Ac-ft	In 1976...(based on 50% of total)
1945 to 2007	1283	of total	50% percent
average aquifer volume	2092	Acft	81.8% avg percent

DG storage	2193	total, Acft	1097	"allowed per SD Co DPLU"
Rock storage	366	total, Acft	183	"allowed per SD Co DPLU"
	2559	total	1279	50% of total capacity (cap)

Initial Aquifer Volume at beginning of calc. period **1279** full (calculations based on 50% of total aquifer volume)

Recharge Rate	8.74%	as % of RF
1945 to 2012	230	AcFt/yr

YEAR	RF	Annual Recharge			Net -pump'g	Start aquifer volume Acft	End aquifer volume Acft (w/pumping)	Net Recharge to Aquifer (water rejected if aquifer is a maximum volume)		
		inches	pct of RF	Acft				In Acft	Rej'd Acft	Rej'd pct
1901	17.44	1.59	9.1%	193.23	20.23	1279.25	1279.25	173.00	20.23	10%
1902	20.00	1.06	5.3%	129.70	-43.30	1279.25	1235.95	129.70	0.00	0%
1903	8.79	0.00	0.0%	0.00	-173.00	1235.95	1062.95	0.00	0.00	0%
1904	31.61	9.04	28.6%	1101.47	928.47	1062.95	1279.25	389.30	712.18	65%
1905	27.07	6.12	22.6%	745.96	572.96	1279.25	1279.25	173.00	572.96	77%
1906	25.42	6.18	24.3%	752.62	579.62	1279.25	1279.25	173.00	579.62	77%
1907	15.57	1.66	10.7%	202.24	29.24	1279.25	1279.25	173.00	29.24	14%
1908	22.87	6.37	27.8%	775.81	602.81	1279.25	1279.25	173.00	602.81	78%

1909	17.42	4.80	27.6%	584.75	411.75	1279.25	1279.25	173.00	411.75	70%
1910	20.44	2.74	13.4%	333.82	160.82	1279.25	1279.25	173.00	160.82	48%
1911	19.07	4.24	22.2%	516.57	343.57	1279.25	1279.25	173.00	343.57	67%
1912	12.83	1.02	8.0%	124.64	-48.36	1279.25	1230.89	124.64	0.00	0%
1913	20.02	2.64	13.2%	321.15	148.15	1230.89	1279.25	221.36	99.79	31%
1914	23.23	4.63	19.9%	564.58	391.58	1279.25	1279.25	173.00	391.58	69%
1915	30.79	15.19	49.3%	1850.51	1677.51	1279.25	1279.25	173.00	1677.51	91%
1916	16.52	1.36	8.2%	165.55	-7.45	1279.25	1271.80	165.55	0.00	0%
1917	13.66	1.22	9.0%	149.10	-23.90	1271.80	1247.90	149.10	0.00	0%
1918	16.56	0.00	0.0%	0.00	-173.00	1247.90	1074.90	0.00	0.00	0%
1919	22.98	3.57	15.5%	434.77	261.77	1074.90	1279.25	377.35	57.42	13%
1920	10.17	0.00	0.0%	0.00	-173.00	1279.25	1106.25	0.00	0.00	0%
1921	33.41	10.30	30.8%	1255.13	1082.13	1106.25	1279.25	346.00	909.13	72%
1922	21.36	0.00	0.0%	0.00	-173.00	1279.25	1106.25	0.00	0.00	0%
1923	15.71	0.00	0.0%	0.00	-173.00	1106.25	933.25	0.00	0.00	0%
1924	12.51	0.00	0.0%	0.00	-173.00	933.25	760.25	0.00	0.00	0%
1925	19.31	0.82	4.2%	99.90	-73.10	760.25	687.15	99.90	0.00	0%
1926	30.42	11.56	38.0%	1407.94	1234.94	687.15	1279.25	765.10	642.84	46%
1927	12.35	0.05	0.4%	6.09	-166.91	1279.25	1112.34	6.09	0.00	0%
1928	16.45	0.90	5.5%	109.71	-63.29	1112.34	1049.05	109.71	0.00	0%
1929	22.75	4.31	18.9%	525.10	352.10	1049.05	1279.25	403.20	121.90	23%
1930	17.36	1.77	10.2%	216.13	43.13	1279.25	1279.25	173.00	43.13	20%
1931	26.20	9.86	37.6%	1201.55	1028.55	1279.25	1279.25	173.00	1028.55	86%
1932	18.17	6.37	35.1%	776.08	603.08	1279.25	1279.25	173.00	603.08	78%
1933	6.49	0.00	0.0%	0.00	-173.00	1279.25	1106.25	0.00	0.00	0%
1934	22.30	3.12	14.0%	380.20	207.20	1106.25	1279.25	346.00	34.20	9%
1935	13.58	0.66	4.9%	80.41	-92.59	1279.25	1186.66	80.41	0.00	0%
1936	25.24	7.17	28.4%	873.55	700.55	1186.66	1279.25	265.59	607.96	70%
1937	16.58	1.21	7.3%	147.96	-25.04	1279.25	1254.21	147.96	0.00	0%
1938	14.81	2.58	17.4%	313.84	140.84	1254.21	1279.25	198.04	115.80	37%
1939	17.43	0.00	0.0%	0.00	-173.00	1279.25	1106.25	0.00	0.00	0%
1940	25.58	3.54	13.9%	431.83	258.83	1106.25	1279.25	346.00	85.83	20%
1941	15.91	0.00	0.0%	0.00	-173.00	1279.25	1106.25	0.00	0.00	0%
1942	15.25	1.91	12.5%	232.11	59.11	1106.25	1165.36	232.11	0.00	0%
1943	18.72	5.01	26.8%	610.14	437.14	1165.36	1279.25	286.89	323.25	53%
1944	14.76	0.63	4.3%	76.76	-96.25	1279.25	1183.01	76.75	0.00	0%
1945	12.94	1.96	15.1%	238.79	65.79	1183.01	1248.80	238.79	0.00	0%
1946	9.29	0.00	0.0%	0.00	-173.00	1248.80	1075.80	0.00	0.00	0%
1947	9.22	0.00	0.0%	0.00	-173.00	1075.80	902.80	0.00	0.00	0%
1948	12.36	1.03	8.3%	124.95	-48.05	902.80	854.75	124.95	0.00	0%
1949	10.38	0.00	0.0%	0.00	-173.00	854.75	681.75	0.00	0.00	0%
1950	11.42	0.05	0.4%	6.09	-166.91	681.75	514.84	6.09	0.00	0%
1951	26.91	7.95	29.5%	968.45	795.45	514.84	1279.25	937.41	31.04	3%
1952	13.33	0.00	0.0%	0.00	-173.00	1279.25	1106.25	0.00	0.00	0%
1953	15.59	2.06	13.2%	250.50	77.50	1106.25	1183.75	250.50	0.00	0%
1954	11.24	0.00	0.0%	0.00	-173.00	1183.75	1010.75	0.00	0.00	0%
1955	11.89	0.00	0.0%	0.00	-173.00	1010.75	837.75	0.00	0.00	0%
1956	14.49	3.10	21.4%	377.68	204.68	837.75	1042.44	377.68	0.00	0%
1957	23.54	1.52	6.5%	185.19	12.19	1042.44	1054.62	185.19	0.00	0%
1958	10.44	0.69	6.6%	84.07	-88.94	1054.62	965.69	84.07	0.00	0%
1959	14.05	0.82	5.8%	99.71	-73.29	965.69	892.40	99.71	0.00	0%

1960	7.24	0.00	0.0%	0.00	-173.00	892.40	719.40	0.00	0.00	0%
1961	15.11	1.13	7.5%	138.23	-34.77	719.40	684.63	138.23	0.00	0%
1962	7.88	0.00	0.0%	0.00	-173.00	684.63	511.63	0.00	0.00	0%
1963	14.81	0.00	0.0%	0.00	-173.00	511.63	338.63	0.00	0.00	0%
1964	12.28	0.00	0.0%	0.00	-173.00	338.63	165.63	0.00	0.00	0%
1965	18.08	6.13	33.9%	746.59	573.59	165.63	739.23	746.59	0.00	0%
1966	15.60	3.05	19.6%	371.59	198.59	739.23	937.82	371.59	0.00	0%
1967	13.37	1.09	8.1%	132.72	-40.28	937.82	897.54	132.72	0.00	0%
1968	20.95	6.40	30.5%	779.72	606.72	897.54	1279.25	554.71	225.01	29%
1969	9.31	0.00	0.0%	0.00	-173.00	1279.25	1106.25	0.00	0.00	0%
1970	11.70	0.00	0.0%	0.00	-173.00	1106.25	933.25	0.00	0.00	0%
1971	7.02	0.00	0.0%	0.00	-173.00	933.25	760.25	0.00	0.00	0%
1972	17.65	0.00	0.0%	0.00	-173.00	760.25	587.25	0.00	0.00	0%
1973	7.94	0.34	4.3%	41.42	-131.58	587.25	455.67	41.42	0.00	0%
1974	12.30	0.00	0.0%	0.00	-173.00	455.67	282.67	0.00	0.00	0%
1975	12.38	0.55	4.4%	67.01	-105.99	282.67	176.68	67.01	0.00	0%
1976	11.12	0.00	0.0%	0.00	-173.00	176.68	3.68	0.00	0.00	0%
1977	24.84	6.08	24.5%	740.17	567.17	3.68	570.86	740.17	0.00	0%
1978	18.77	2.55	13.6%	310.79	137.79	570.86	708.65	310.79	0.00	0%
1979	29.00	12.41	42.8%	1511.46	1338.46	708.65	1279.25	743.60	767.86	51%
1980	10.04	0.00	0.0%	0.00	-173.00	1279.25	1106.25	0.00	0.00	0%
1981	14.39	1.09	7.6%	132.80	-40.20	1106.25	1066.05	132.80	0.00	0%
1982	28.50	6.29	22.1%	766.93	593.93	1066.05	1279.25	386.20	380.73	50%
1983	12.50	0.00	0.0%	0.00	-173.00	1279.25	1106.25	0.00	0.00	0%
1984	14.04	0.30	2.1%	36.55	-136.45	1106.25	969.80	36.55	0.00	0%
1985	17.10	0.00	0.0%	0.00	-173.00	969.80	796.80	0.00	0.00	0%
1986	12.33	0.00	0.0%	0.00	-173.00	796.80	623.80	0.00	0.00	0%
1987	16.83	0.00	0.0%	0.00	-173.00	623.80	450.80	0.00	0.00	0%
1988	9.09	0.00	0.0%	0.00	-173.00	450.80	277.80	0.00	0.00	0%
1989	7.83	0.00	0.0%	0.00	-173.00	277.80	104.80	0.00	0.00	0%
1990	18.62	5.75	30.9%	700.54	527.54	104.80	632.34	700.54	0.00	0%
1991	18.83	1.74	9.3%	212.53	39.53	632.34	671.87	212.53	0.00	0%
1992	33.92	16.12	47.5%	1963.47	1790.47	671.87	1279.25	780.38	1183.08	60%
1993	13.28	0.00	0.0%	0.00	-173.00	1279.25	1106.25	0.00	0.00	0%
1994	25.93	7.55	29.1%	919.60	746.60	1106.25	1279.25	346.00	573.60	62%
1995	9.73	0.00	0.0%	0.00	-173.00	1279.25	1106.25	0.00	0.00	0%
1996	9.86	0.38	3.9%	46.30	-126.70	1106.25	979.55	46.30	0.00	0%
1997	28.12	6.04	21.5%	735.39	562.39	979.55	1279.25	472.70	262.68	36%
1998	10.01	0.00	0.0%	0.00	-173.00	1279.25	1106.25	0.00	0.00	0%
1999	7.59	0.00	0.0%	0.00	-173.00	1106.25	933.25	0.00	0.00	0%
2000	9.62	0.00	0.0%	0.00	-173.00	933.25	760.25	0.00	0.00	0%
2001	4.52	0.00	0.0%	0.00	-173.00	760.25	587.25	0.00	0.00	0%
2002	13.21	0.00	0.0%	0.00	-173.00	587.25	414.25	0.00	0.00	0%
2003	12.74	0.00	0.0%	0.00	-173.00	414.25	241.25	0.00	0.00	0%
2004	26.84	7.27	27.1%	885.90	712.90	241.25	954.15	885.90	0.00	0%
2005	8.66	0.00	0.0%	0.00	-173.00	954.15	781.15	0.00	0.00	0%
2006	7.20	0.00	0.0%	0.00	-173.00	781.15	608.15	0.00	0.00	0%
2007	13.69	3.78	27.6%	460.96	287.96	608.15	896.11	460.96	0.00	0%
2008	13.61	2.25	16.5%	274.13	101.13	896.11	997.23	274.13	0.00	0%
2009	21.07	6.22	29.5%	758.29	585.29	997.23	1279.25	455.02	303.27	40%
2010	20.70	4.92	23.8%	599.69	426.69	1279.25	1279.25	173.00	426.69	71%
2011	15.84	0.00	0.0%	0.00	-173.00	1279.25	1106.25	0.00	0.00	0%
2012	10.93	0.00	0.0%	0.00	-173.00	1106.25	933.25	0.00	0.00	0%

Attachment 3.

Supplemental Well and Test Logs, Wells MW-21A and HG-60

Existing wells HG-21A and HG-31 were initially installed as unlined test wells for the formerly-proposed Campo Landfill. They were prepared for water production by overdrilling followed by the installation of casing (PVC SDR 17) and a pea gravel filter packing within the well annulus.

HG-21A has a total depth of 480 feet, with an estimated yield of 60 gpm (1-hour air lift test).

HG-31 has a total depth of 360 feet, with an estimated yield of 100 gpm (1-hour air lift test). HG-31 is nearby to well HG-60. As described in AECOM (2012). HG-60 has a reported well capacity of 25 gpm. These wells may be used together.

The well logs, and the exact well locations within the Reservation, are confidential. While not applicable to the Campo Reservation, confidentiality of drillers logs is consistent with State Law (California Water Code 13752),

Attachment 4.
Letter to JFI from Muht-Hei, Inc.



Muht-Hei Inc.

President: Marcus Cuero
Vice President: Ronnie Lee Cuero
Secretary: Youngbird Tampo
Treasurer: Jackie Lelafu
Board Member: Frederick Connolly
Board Member: Michael Connolly
Board Member: Henry Brown

Jed Francis
Jed Francis, Inc.
9530 Hageman Road, Suite B-356
Bakersfield, California 93312

Re: Sales and Storage Agreement

Dear Mr. Francis:

I write in connection with the Sales and Storage Agreement ("Agreement") that is to be entered into between Muht-Hei, Inc. d/b/a Campo Materials Company ("CMC") and Jed Francis, Inc. ("JFI").

Muht-Hei ("MHI") is a corporation formed under tribal law and wholly owned by the Campo Band of Mission Indians ("the Band"). MHI's delegated authority from the General Council of the tribe includes "authority and responsibility for the management, development, and operations of the real and personal property together with all buildings and improvements thereon as set forth in Section 4" of the First Amended and Restated Articles of Incorporation ("Articles"). MHI Articles, Section 9(1).

Pursuant to this corporate authority, MHI is granting JFI the right to use water at the CMC facility pursuant to the terms and conditions set forth in the Agreement. The property on which the water source is located is trust land beneficially owned by the Band. The delegation of authority to MHI in Section 9(1) of its Articles by the General Council does not require additional Council approval.

The Agreement contains no restriction that would prohibit JFI from using the water for construction purposes for off-Reservation projects, provided JFI's use remains within the safe yields as determined by previous studies. The Band will monitor groundwater drawdowns, and the Agreement expressly reserves the right to discontinue drafts if there is evidence of excessive depletion. Drafts will remain within the sustained yield calculations for the basin drawn and will not result in a measurable effect on off-Reservation storage.

This Agreement has not been submitted to the BIA. BIA approval is unnecessary because the Agreement does not encumber tribal land, has a term of fewer than seven years, and requires no federal action that would trigger a NEPA process.

Sincerely,

MUHT-HEI, INC.

By: Marcus Cuero
Marcus Cuero, President

Read & Approved



Ralph Goff
Chairman
Campo Band of Mission Indians

EXHIBIT

4



EAST COUNTY SUBSTATION PROJECT MINOR PROJECT REFINEMENT REQUEST FORM

Date Submitted:	09-20-13 (Originally Submitted) 10-01-13 (Resubmitted)	Request #:	8	
Date Approval Required:	10-01-13	Landowner:	Not Applicable (N/A)	
APN:	N/A			
Refinement from (check all that apply):				
<input type="checkbox"/> Mitigation Measure	<input type="checkbox"/> APM	<input checked="" type="checkbox"/> Project Description	<input type="checkbox"/> Drawing	<input type="checkbox"/> Other
Identify source (mitigation measure, project description, etc.):				
<p>Pages B-3 and B-37 of Section B Project Description of the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) and the Construction Water Supply Plan, which was approved by the California Public Utilities Commission on January 31, 2013, for the East County (ECO) Substation Project (Project) describe the water usage required during construction of the Project. The information in this Minor Project Refinement (MPR) request describes a change in the amount of construction water consumption that was previously estimated in the Final EIR/EIS and the Construction Water Supply Plan. A description of and justification for the requested refinement are provided on pages 1 and 2 of this MPR request.</p>				
Attachments (check all that apply):				
<input checked="" type="checkbox"/> Refinement Screening Form (provided as Attachment A: Minor Project Refinement Request Screening Form)				
Under Order 3 of the Decision Granting SDG&E Permit to Construct the East County Substation Project (D.12-04-022), the CPUC may approve minor project refinements under certain circumstances. In accordance with Order 3 of the Decision, respond “yes” or “no” to the following questions (a) through (d).				
(a) Is the proposed refinement outside the geographic boundary of the EIR/EIS study area? No. The proposed refinement requests a change to the Project description than what was presented in the Final EIR/EIS, which provided an estimated volume of water to be used during construction, and will not result in any change in geographic location.				
(b) Will the proposed refinement result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the EIR/EIS? No. No change in impacts to any resource area evaluated in the Final EIR/EIS is anticipated to result from the requested refinement. The following resource areas apply to the Project’s construction water usage and are discussed in detail in Attachment A: Minor Project Refinement Request Screening Form: air quality, climate change, water resources, public services and utilities, and transportation and traffic.				
(c) Does the proposed refinement conflict with any mitigation measure or applicable law or policy? No.				
(d) Does the proposed refinement trigger an additional permit requirement? No. Construction water usage was contemplated in Section B. Project Description of the Final EIR/EIS. No additional permits will be required.				
Describe refinement being requested (attach drawings and photos as needed):				
<p>SDG&E is requesting an increase in the total water usage that will be needed throughout construction of the Project. This MPR request proposes that the total construction water usage be increased to an estimated 90 million gallons. While the Final EIR/EIS included an estimate of 30 million gallons for total construction water use, SDG&E increased this estimate to 50 million gallons prior to the start of construction as part of its January 2013 Construction</p>				

Water Supply Plan. This increase was found to be consistent with the language in the Final EIR/EIS in light of the selection of the ECO Partial Underground 138 kV Transmission Route Alternative (UG Alternative).

Provide need for refinement (attach drawings and photos as needed):

This MPR request has been prepared as a result of the necessity to increase the Project’s overall construction water usage in order to continue to meet soil compaction standards and dust control requirements associated with the Project’s Mitigation Monitoring, Compliance, and Reporting Program. The conditions at the ECO Substation site, which is currently under construction, have differed from what was originally anticipated, resulting in a higher Project demand for construction water. Based on the geotechnical report, the contractor estimated that remedial removal and recompaction of alluvial soil at the ECO Substation site was expected to reach a maximum depth of 10 feet. However, during mass-grading of the ECO Substation site, remedial removal and recompaction of alluvium in excess of 20 feet in depth across most of the site was necessary to reach the formational, hard pan soils under the 230/138 kilovolt (kV) and 500 kV pad areas. The deeper than expected alluvial removal also triggered the need to construct a buttress slope outside of the grading limits on the south side of 500 kV pad to accommodate proper compaction of the soils within the grading limits.

In addition, the moisture content of the in-situ soils were lower than anticipated, resulting in higher water usage for recompaction and dust control. The anticipated amount of water to provide the optimum moisture content for compaction prior to the start of construction was estimated at 30 gallons per cubic yard, based on a typical project at this elevation with similar soils and climate, but the actual water required to achieve the optimum moisture content for compaction has been approximately 45 gallons per cubic yard. In total, SDG&E’s construction contractor now estimates handling approximately 50 percent more material than was originally planned in order to complete grading at the ECO Substation site. These differing site conditions will result in the use of approximately 50 to 55 million gallons of water during mass grading of the ECO Substation site alone.

Accordingly, an increase in the water needed to complete construction of the ECO Substation along with the other Project components is necessary. SDG&E’s construction contractor estimates that approximately 40 to 45 million additional gallons of water will be needed to complete construction of the ECO Substation following mass grading and for construction activities at the Boulevard Substation, the underground and overhead portions of the transmission line, the SWPL Loop-in, and the other associated Project components, such as the construction yards. At the end of August 2013, the Project had used approximately 42 million gallons of water. Therefore, approximately 40 million gallons of water, in addition to the 50 million gallons already approved through the January 2013 Construction Water Supply Plan, will be needed to complete construction of the Project.

Date refinement is expected to be implemented:	10-02-13
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SDG&E Approvals

Title	Name	Approval Initials	Date	Conditions (see attached)	
Environmental Project Manager	Don Houston	DH	09/19/13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Environmental Compliance Lead	Kirstie Reynolds	KR	09/19/13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Substation Project Manager	Matt Huber	MH	09/19/13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Environmental Field Supervisor	Jeffrey Coward	JC	09/19/13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Landowner Approval (if required)

Landowner Name	Signature or Other Consent
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No landowner approvals are required as a result of the requested refinement.

Resource Agency Coordination				
Resource Agency	Name	Action Required	Date	Documentation (see attached if yes)
No resource agency coordination will be required as a result of the requested refinement.				

ATTACHMENT A: MINOR PROJECT REFINEMENT REQUEST SCREENING FORM

MINOR PROJECT REFINEMENT REQUEST SCREENING FORM

RESOURCE EVALUATION

The proposed Minor Project Refinement request was evaluated to verify that it will not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS). The following table provides a brief summary of the potential impact for each resource area analyzed in the Final EIR/EIS.

EIR/EIS Section	Summary of Potential Impacts
<p>Air Quality and Climate Change</p>	<p><i>No Change.</i> The Impact AIR-1 discussion in Section D.11.3.3 of the Final EIR/EIS recognizes that "...water for dust control and other purposes during construction would be transported by water trucks from off-site locations within San Diego County, potentially as far away as San Diego." Combined with emissions associated with other construction activities (such as mass grading), Impact AIR-1 was classified as Class 1 significant and unmitigable.</p> <p>Section D.9.3.3 of the Final EIR/EIS stated that "Construction of the ECO Substation would require up to 30 million gallons of water. If enough water cannot be located on site or purchased from nearby sources, water would be imported from the City of San Diego or the Sweetwater Authority." The following assumptions were made regarding water deliveries: 4,000-gallon water trucks would be used to delivery water, with a maximum of 43 truck trips per day over 8 months, resulting in "an additional 7,500 truck trips" to transport water to the ECO Substation Project site. In this same paragraph on page D.9-22, the Final EIR/EIS states that "All vehicles and equipment would enter the ECO Substation site from Old Highway 80." From reviewing the detailed discussion in this section of the Final EIR/EIS, it is apparent that the estimate of 30 million gallons of water was for construction of only one Project component—the ECO Substation during its period of peak demand (i.e., grading). This is evidenced by the specific references to transportation routes and construction duration of just eight months.</p> <p>Using the assumptions in Section D.9.3.3 and those found in "Appendix 8- Air Quality and Greenhouse Gas Revisions to Applicant's Environmental Information" (Appendix 8), the total mileage associated with water deliveries to the ECO Substation during mass grading can be calculated as 1,155,840 miles, assuming water would be supplied from the City of San Diego (approximately 140 miles round trip) at 43 trips per day for a total of 6,020 vehicle-miles traveled per day for approximately 192 days (32 weeks times 6 days per week).</p> <p>The table below summarizes the Project's current water usage through the end of August 2013, which coincides with the period of mass grading for the ECO Substation. The table demonstrates that the total mileage through August 2013 remains less than the 1,155,840 miles contemplated in the Final EIR/EIS analysis. This is in part due to the fact that closer sources have been used, reducing the mileage required for the deliveries, and because haul trucks with capacities of 5,000 to 7,000 gallons have been used, reducing the number of trips required to make the deliveries. Based on these actuals, SDG&E predicts that the total mileage, and therefore the associated emissions, for the period of peak demand will remain consistent with that contemplated in the Final EIR/EIS.</p>

EIR/EIS Section	Summary of Potential Impacts																																					
	<table border="1"> <thead> <tr> <th>Source Name</th> <th>Total Gallons as of 8/31/2013</th> <th>Approximate # of Loads</th> <th>Average Gallons Per Load</th> <th>Average Miles per Load (roundtrip)</th> <th>Total Miles as of 8/31/2013</th> </tr> </thead> <tbody> <tr> <td>City of San Diego</td> <td>31,767,494</td> <td>5,528</td> <td>5,747</td> <td>140</td> <td>773,873</td> </tr> <tr> <td>Campo</td> <td>4,792,587</td> <td>805</td> <td>5,950</td> <td>46</td> <td>37,052</td> </tr> <tr> <td>JCSD*</td> <td>8,251,839</td> <td>2,997</td> <td>2,753</td> <td>8</td> <td>23,979</td> </tr> <tr> <td>LOS*</td> <td>243,575</td> <td>131</td> <td>1,859</td> <td>30</td> <td>3,931</td> </tr> <tr> <td>TOTAL</td> <td>45,055,495</td> <td>9,462</td> <td>16,309</td> <td>88.65710489</td> <td>838,835</td> </tr> </tbody> </table>	Source Name	Total Gallons as of 8/31/2013	Approximate # of Loads	Average Gallons Per Load	Average Miles per Load (roundtrip)	Total Miles as of 8/31/2013	City of San Diego	31,767,494	5,528	5,747	140	773,873	Campo	4,792,587	805	5,950	46	37,052	JCSD*	8,251,839	2,997	2,753	8	23,979	LOS*	243,575	131	1,859	30	3,931	TOTAL	45,055,495	9,462	16,309	88.65710489	838,835	<p>*Water spray trucks with a capacity of approximately 3,500 gallons are being used at these locations; tanker trucks with capacities of 5,000 to 7,000 gallons are not being used.</p> <p>Further, “Appendix 8- Air Quality and Greenhouse Gas Revisions to Applicant’s Environmental Information” (Appendix 8) states “Later phases that would require water deliveries would result in lower combined emissions than this period.” Thus, the analysis indicates that additional water would be required for the Project, but emissions resulting from this water transport were not calculated due to the fact that they would be lower than the peak transport period required for the ECO Substation component of the Project (which represents the worst-case scenario).</p> <p>Because the analysis was based on a worst-case scenario (with grading of the substation and peak water deliveries occurring at the same time), even if the water remained at the peak level for the whole Project (16-months), which is not anticipated, the emissions would still be under the criteria air pollutant and GHG thresholds analyzed in the Final EIR/EIS.</p> <p>SDG&E’s Amended Construction Water Supply Plan, which was submitted to the CPUC on September 13, 2013, includes an updated water estimate of 90 million gallons, which represents a 40-million-gallon increase in SDG&E’s prior water usage estimate of 50 million gallons. As described in the Plan, SDG&E is obtaining construction water from a variety of sources, some as close as four miles from the ECO Substation Site. SDG&E is committed to reducing emissions for water hauling on the Project. Therefore, once mass grading at the ECO Substation is complete, SDG&E will utilize water from the two closest water sources—Campo Indian Reservation and Jacumba Community Services District—to the maximum extent feasible while remaining compliant with the protections for local water sources required by MM HYD-3 and the Project’s Construction Water Supply Plan. Utilization of these closer sources will reduce emissions as well as allow SDG&E the flexibility to use additional water above the 90 million gallon estimate included in the September 30, 2013 Amended Construction Water Supply Plan, if necessary, to respond to differing site conditions and/or implementation of mitigation measures associated with dust control and fire prevention.</p> <p>As long as mileage associated with water truck deliveries for the remainder of construction remains less than the 1.15 million miles assumed in the Final EIR/EIS to be expended during mass grading at the ECO Substation, the Project’s emissions will remain consistent with the impacts previously contemplated by the Final EIR/EIS. As demonstrated in the table below, the potential to obtain an additional 48 million gallons of water (90 million gallons requested in the Plan minus 42 million gallons already consumed) needed to complete construction over the approximately 12 months that remain can be accomplished while limiting mileage for water deliveries to less than approximately 35 percent of the total mileage (an approximate 400,000 thousand mile estimate for total additional mileage</p>
Source Name	Total Gallons as of 8/31/2013	Approximate # of Loads	Average Gallons Per Load	Average Miles per Load (roundtrip)	Total Miles as of 8/31/2013																																	
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EIR/EIS Section	Summary of Potential Impacts																														
	<p>to deliver 48 million gallons divided by 1.15 million miles assumed in the Final EIR/EIS) expended during the mass grading activities at the ECO Substation site. Note that actual trips, gallons per load, and the distribution of sources may vary from that provided below, which is for illustration purposes only.</p> <table border="1"> <thead> <tr> <th>Source Name</th> <th>Estimate of Loads per Month</th> <th>Average Gallons per Load*</th> <th>Estimated Gallons for 12 months</th> <th>Average Mileage per Load</th> <th>Total Mileage</th> </tr> </thead> <tbody> <tr> <td>City of San Diego</td> <td>48</td> <td>5,747</td> <td>3,310,272</td> <td>140</td> <td>80,640</td> </tr> <tr> <td>Campo</td> <td>450</td> <td>5,950</td> <td>32,130,000</td> <td>46</td> <td>248,400</td> </tr> <tr> <td>JCSD</td> <td>400</td> <td>2,753</td> <td>13,214,400</td> <td>8</td> <td>38,400</td> </tr> <tr> <td>TOTAL</td> <td>898</td> <td>4,800</td> <td>48,654,672</td> <td>125</td> <td>367,440</td> </tr> </tbody> </table> <p>*The gallons per load averages are based on actuals as of August 27, 2013.</p> <p>As a result, the total emissions for the requested refinement will be consistent with what was analyzed in the Final EIR/EIS, and the requested refinement will not trigger an exceedance of the greenhouse gas emissions threshold. Therefore, the requested refinement will not result in a new, significant impact or a substantial increase in the severity of a previously identified impact to air quality, which was evaluated as significant and unavoidable (Class I) in the Final EIR/EIS, or to climate change, which was evaluated as less than significant (Class III) in the Final EIR/EIS.</p>	Source Name	Estimate of Loads per Month	Average Gallons per Load*	Estimated Gallons for 12 months	Average Mileage per Load	Total Mileage	City of San Diego	48	5,747	3,310,272	140	80,640	Campo	450	5,950	32,130,000	46	248,400	JCSD	400	2,753	13,214,400	8	38,400	TOTAL	898	4,800	48,654,672	125	367,440
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Water Resources	<p><i>No Change.</i> The Impact HYD-4 discussion in Section D.12.3.3 of the Final EIR/EIS analyzes whether the Project could deplete local water supplies. The Impact HYD-4 analysis focuses on whether water use during construction would affect groundwater levels in the vicinity of the Project, not the amount of water necessary for construction. The Final EIR/EIS concludes that this impact is significant but able to be mitigated to a less than significant level (Class II). The Final EIR/EIS further proposes the implementation of Mitigation Measure (MM) HYD-3 to "...mitigate impacts to groundwater within the Project area by ensuring that groundwater availability would not be adversely affected" and "... ensure that use of local groundwater during construction would not impact the production rates of groundwater wells within a 1-mile radius." MM HYD-3 also requires SDG&E to provide the "...total gallons of water needed through construction..." along with evidence that the water is available from both purchased water sources and/or groundwater wells.</p> <p>As demonstrated throughout the Impact HYD-4 analysis in the Final EIR/EIS, the Class II significance level for impacts to water resources are not dependent on the amount of water used, but rather whether construction would impact groundwater in the Project area and whether water demand could be met by area sources. Accordingly, any increase, even a substantial increase, in the amount of water used for construction would be consistent with the analysis in the Final EIR/EIS as long as groundwater in the area is not affected and sufficient water can be supplied.</p> <p>SDG&E's implementation of MM HYD-3 and the Project's Amended Construction Water Supply Plan, including Section 7 Monitoring Plan requirements for the Campo Indian Reservation, will continue to demonstrate that SDG&E is able to meet construction water demands from a combination of sources and its use of construction water will not adversely impact groundwater in the area.</p> <p>As a result, the requested refinement will not result in a new, significant impact nor a</p>																														

EIR/EIS Section	Summary of Potential Impacts
	substantial increase in the severity of a previously identified impact to water resources, which was evaluated as significant but able to be mitigated to less than significant (Class II) in the Final EIR/EIS.
Public Services and Utilities	<p><i>No Change.</i> The Impact PSU-3 discussion in Section D.14.3.3 of the Final EIR/EIS discusses the availability of water in amounts sufficient to meet the substantial demands necessary for construction so as not to adversely impact area sources of water. The Final EIR/EIS concludes that this impact is significant but able to be mitigated to a less than significant level (Class II). As demonstrated throughout the Impact PSU-3 analysis in the Final EIR/EIS, the Class II significance level for impacts to public services and utilities are not dependent on the amount of water used, but rather whether construction would impact groundwater in the Project area and whether water demand could be met by area sources. As described in the Water Resources evaluation of this Minor Project Refinement Request Screening Form, SDG&E's implementation of MM HYD-3 and the Project's Amended Construction Water Supply Plan, including Section 7 Monitoring Plan requirements for the Campo Indian Reservation, will continue to demonstrate that SDG&E is able to meet construction water demands from a combination of sources and its use of construction water will not adversely impact groundwater in the area. Therefore, the proposed refinement will not result in an additional impact to any public water supply.</p> <p>The maximum total volumes of 50 million gallons from the City of San Diego, 15 million gallons from the Jacumba Community Service District, and 35 million gallons from Live Oak Springs Water Company will remain consistent with the originally confirmed volumes that were reported in the Construction Water Supply Plan, which was approved by the CPUC on January 31, 2013. Confirmation letters from all three sources of construction water were provided in the September 2013 Amended Construction Water Supply Plan.</p> <p>No public services will be disrupted as a result of the proposed refinement as no additional construction activities from what was described in the Final EIR/EIS will be associated with the requested increase in construction water usage. The duration of construction will not be greater than what was originally anticipated, and no different types or additional volumes of waste as was analyzed for in the Final EIR/EIS will be generated.</p> <p>Because no public services, utilities, or water supplies will be interrupted as a result of the requested refinement, the requested refinement will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to public services and utilities, which was evaluated as significant but able to be mitigated to less than significant (Class II) in the Final EIR/EIS.</p>
Transportation and Traffic	<p><i>No Change.</i> As discussed in the Air Quality and Climate Change evaluation of this Minor Project Request Screening Form, the mileage associated with water truck deliveries during construction will not exceed the 1.15 million miles assumed in the Final EIR/EIS as a result of the proposed refinement. In addition, all construction activities associated with the requested refinement will be conducted in accordance with the Project's Traffic Control Plans. Therefore, the requested refinement will not result in a new, significant impact nor a substantial increase in the severity of a previously identified impact to transportation and traffic, which was evaluated as significant but able to be mitigated to less than significant (Class II) in the Final EIR/EIS.</p>

EXHIBIT

5

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



December 19, 2013

File No. 602-19

Nazar Najor
Live Oak Springs Water Company
PO BOX 1241
Boulevard, CA 91905

Re: Rejection of Advice Letter 28

Dear Mr. Najor:

Please be advised that the Division of Water and Audits is rejecting Live Oak Springs Water Company Advice Letter No. 28, filed on February 1, 2013, requesting approval of a contract to supply water to Beta Engineering. This advice letter was previously suspended on February 21, 2013. Given the results of this Commission's investigation into the operations and practices of the utility (Investigation No. 12-08-004) which ordered that a petition be filed in Superior Court "for the appointment of a receiver to assume possession of and operation of the water system...", we reject Advice Letter No. 28 with prejudice.

As a reminder, rejected tariff sheets shall be retained in the utility's file of canceled and superseded sheets, and sheet numbers and advice letter numbers shall not be reused.

Please contact me at (415) 703-1279 or bmd@cpuc.ca.gov if you have any questions.

Very truly yours,

A handwritten signature in black ink, appearing to read "Bruce DeBerry".

BRUCE DeBERRY
Program Manager
Water & Sewer Advisory Branch

EXHIBIT

6

Live Oak Springs Water and Power

P.O. Box 1241, Boulevard, CA 91905 * 619-889-8666 cell * nazar@liveoaksprings.com

February 1, 2013

Director
Division of Water and Audits
505 Van Ness Ave.
San Francisco, Ca. 94102

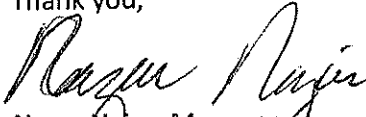
To Whom It May Concern:

Attached is Advice Letter Number 28 on behalf of Live Oak Springs Water & Power. We have retained a hydrogeologist to complete a Preliminary Groundwater Resources Evaluation Study (See attached). This study requires running the wells for a number of days without stopping.

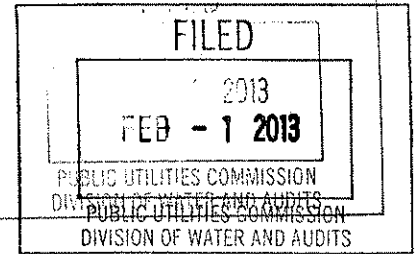
We request that the Division of Water and Audits process our request no later than February 22, 2013 or 21 days since our e-mail Advice Letter was sent on February 1, 2013.

Also, please note that we never received the suspension of the prior advice letter. Neither did our consultant Frank Brommenschenkel. If there are any issues related to this draft not being granted, please e-mail myself, our consultant, Fred Curry and a hard copy by registered mail or confirmation of e-mail received by Live Oak Springs Water Company.

Thank you,


Nazar Najor, Manager
Live Oak Springs Water Company

Live Oak Springs Water & Power Co.
PO Box 1241
Boulevard, CA 91905



February 1, 2013

Advice Letter No. 28

TO THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Live Oak Springs Water & Power Co. (Live Oak Springs) hereby transmits for filing the following changes in its tariff schedules and one copy of each are attached hereto:

Cal. P.U.C. Sheet No.	Title of Sheet	Schedule No.	Cancelling Sheet No.
294-W	List of Contracts and Deviations	IA	New
295-W	Table of Contents	None	291-W

This Advice Letter is submitted in accordance with Tariff Rule 13, Temporary Service - Conditions to providing temporary service or service to speculative projects. Live Oak Springs has entered into a contract to supply construction water to Beta Engineering California LP.. This Advice Letter is filed to replace AL # 27-W-A that was withdrawn. This contract provides that Live Oak Springs is not selling as much water as requested in AL # 27-W-A. The new contract states that Live Oak Springs will sell only what is available after customers and fire suppression needs are met. The water that Live Oak Springs is selling is from 1) surface water from a pond 2) Well Number 1, which is offline, dedicated for irrigation only and 3) Limited amount of potable water from Well #2.

General Order 96-B Water Industry Rule 8.3 Contract or Other Deviation provides the necessary authority and instruction for this filing (see Pub. Util. Code §§ 532, 2712; General Rule 8.5.6; Industry Rules 4.3, 7.3.2(3)) and reads as follows:

After entering into a Contract or other deviation, but at least 30 days before the effective date of the rate or service, the Utility shall file an advice letter requesting approval and updating its list of Contracts and other deviations.

Each Contract shall contain substantially the following provisions:

- (1) "This Contract may not become effective until it is approved by the California Public Utilities Commission"; and
- (2) "This Contract at all times shall be subject to such modifications as the California Public Utilities Commission may direct from time to time in the exercise of its jurisdiction."

This advice letter replaces AL # 27, which has been withdrawn. This contract specifically requires that all water provided by Life Oak Springs be excess to its existing needs. This supply can be terminated at any time.

Protest and Notice

A customer may protest an advice letter in which a Utility seeks approval of a Contract or other deviation for the purpose of providing service to that customer. Such protest, if it only concerns a rate or charge under the Contract or other deviation, may include a request for service pending disposition of the advice letter. Alternatively, in that situation, the Utility may request to provide service pending disposition of the advice letter. Staff will approve the request for service unless, based either on another protest or Staff's own analysis, Staff finds that there is a substantial issue that should be resolved before service is provided; however, if Staff approves the request, Staff will require the customer, as a condition of such service, to deposit with the Commission the sum(s) of money in dispute pending disposition of the advice letter.

Live Oak Springs requests that it be allowed to provide service pending disposition of this advice letter.

The agencies on the service list attached have been provided a copy of this filing in accordance with GO 96-B.

Per G.O. 96-B, Water Industry Rule 7.3.2 this is a Tier 2 Advice Letter subject to approval by staff.

This filing will not cause withdrawal of service, nor conflict with any other schedule or rule.

Live Oak Springs Water & Power Co.

By: Nazar Nazari
for Nazar Nazari

Attachments:

Temporary Water Service Contract

Live Oak Springs Water & Power Co.

ADVICE LETTER NO. 28

SERVICE LIST

(Per Section 4.3 of GENERAL ORDER NO. 96-B)

Via First Class US Mail

Service List:

County of San Diego
PO Box 129261
San Diego, CA 92101

Chamber of Commerce
PO Box 567
Boulevard, CA 91905

California-American Water Company
4701 Beloit Drive
Sacramento, CA 95838

Copies of this Advice Letter were mailed to the above list on the date listed above by:

Nazar Najor

Nazar Najor, Manager
Live Oak Springs Water Company

TABLE OF CONTENTS

The following listed tariff sheets contain all effective rates and affecting rates and service of the utility, together with information relating thereto:

<u>Subject Matter of Sheet</u>	<u>Cal. P.U. C. Sheet No.</u>	
Title Page	202-W	
Table of Contents	293-W, 277-W	(C)
Preliminary Statement	264-W - 266-W, 289-W, 292-W	
Service Area Map	43-W	
 Rate Schedules:		
Schedule No. 1, Metered Service	283-W	
Schedule No. LC, Late Payment Charge	246-W	
Schedule No. UF, Surcharge to Fund PUC Reimbursement Fee	258-W	
List of Contracts and Deviations	292-W	(N)
 Rules:		
No. 1 Definitions	135-W, 136-W	
No. 2 Description of Service	121-W	
No. 3 Application for Service	267-W	
No. 4 Contracts	75-W	
No. 5 Special Information Required on Forms	362-W - N - 270-W	
No. 6 Establishment & Re-establishment of Credit	78-W	
No. 7 Deposits	326-W, W, 272-W	
No. 8 Notices	256-W, W, 208-W	
No. 9 Rendering and Payment of Bills	270-W, W, 248-W	
No. 10 Disputed Bills	365-W, W, 274-W	
No. 11 Discontinuance & Restoration of Service	272-W - N - 256-W	
No. 12 Information Available to Public	130-W, W, 90-W	
No. 13 Temporary Service	132-W, W, 92-W	
No. 14 Continuity of Service	93-W	
No. 15 Main Extensions	297-W - 309-W, W, 243-W	
No. 16 Service Connections, Meters, and Customer's Facilities	310-W - N - 230-W	
No. 17 Measurement of Service	166-W	
No. 18 Meter Tests and Adjustment of Bills for Meter Error	136-W - N - 104-W	
No. 19 Service to Separate Premises and Multiple Units, and Resale of Water	167-W, 168-W	(T)
No. 20 Water Conservation	231-W	
No. 21 Fire Protection	232-W	

(continued)

(To be inserted by utility) Advice Letter No. <u>28</u>	Issued by <u>Nazar Najor</u> NAME <u>Manager</u> TITLE	(To be inserted by Cal. P.U.C.) Date Filed _____ Effective _____ Resolution No. _____
Decision No. _____		

Live Oak Springs Water & Power Co.
San Diego County

Canceling

Original

Cal. P.U.C. Sheet No.

294-W

Cal. P.U.C. Sheet No.

List of Contracts and Deviations

Name and Location of Customer	Type or Class of Service	Execution & Expiration Dates	Commission Authorization Number and Date	<u>Most Comparable Regular Tariff</u>	
				Schedule No.	Contract Differences
Beta Engineering California LP	Mostly non-Potable Water	February 8, 2013 to December 31, 2014	N/A	None	New Service (N)
					(N)

FILED REJECTED
DEC 19 2013
PUBLIC UTILITIES COMMISSION
STATE OF CALIFORNIA

(To be inserted by utility)
Advice Letter No. 28

Decision No. G.O. 96-B

Issued by
Nazar Najor
NAME
Manager
TITLE

(To be inserted by Cal. P.U.C.)
Date Filed _____
Effective _____
Resolution No. _____

EXHIBIT

7

ADVICE LETTER (AL) SUSPENSION NOTICE *
DIVISION of WATER & AUDITS

Utility Name	Live Oak Springs	Date Utility Notified	2/21/2013
Utility No./Type	WTD 390	via	
Advice Letter No.	28	[] Fax No.	()
Date AL filed	2/1/2013	[X] E-Mail	nazar@liveoaksprings.com flcurry@gmail.com
Utility Contact Person	Nazar Najor Fred Curry	[] Mail	
Utility Telephone No.	(619) 889-8666	Date Calendar Clerk Notified	
DWA Project Manager	Eric VanWambeke	DWA Staff Analyst	Albert Schiff

[X] INITIAL SUSPENSION (up to 120 DAYS)

This is to notify you that the above-indicated AL is suspended from 2/21/2013 to 6/14/2013 for the following reason(s). If the Commission does not act on this AL within this time, the second suspension will commence automatically.

- [] AL Protested
- [] Resolution is required
- [] AL not in compliance with Commission Statute/Decision/Resolution
- [X] Additional information is required (See attachment)
- [] Additional time is required
- [] Other _____

[] FURTHER SUSPENSION (up to 180 DAYS)

The Commission has not taken action on this AL; therefore, an additional 180-day suspension period will automatically commence on ___/___/___.

If you have any questions regarding this matter, please contact Albert Schiff at 415-703-2144 or via e-mail at aas@cpuc.ca.gov.

Cc: Division Director
Program Manager

Protestants
Division Process Personnel

Please provide the following additional information required for determining CPUC approval of Live Oak Springs Water Company's (LOSWC) AL-28 for trucking water by March 7, 2013:

1. Provide approval by the Department of Environmental Health, Small Drinking Water Systems, County of San Diego (DEHSD) for amount of water they estimate can be trucked.
2. Provide signed estimation by engineering firm Dudek of Encinitas, CA prepared by Trey Driscoll for AL 28.
3. Provide statement by the State Water Resources Control Board (SWRCB) that water rights for the pond to be used to supply trucked water have been resolved
4. Provide statement that LOSWC has not proceeded to sell water without CPUC permission to Beta Engineering for trucking to a construction site.
5. Update present LOSWC map in tariff file to show existence of the pond and its location.

EXHIBIT

8



March 21, 2013

Nazar Najor
Live Oak Springs
37820 Old Highway 80
P.O. Box 1241
Boulevard, CA 91905

Notice of Violation

This notice is sent under authority granted to the California Public Utilities Commission's Division of Water and Audits (DWA) in Resolution (Res.) W-4799 dated October 30, 2009 which is attached. Res. W-4799 authorizes the DWA Staff to issue a Citation to any water or sewer utility for violations listed in Appendix A of the resolution.

DWA has evidence that Live Oak Springs Water Company has been selling trucked water to Beta Engineering for use at San Diego Gas & Electric Company's East County Substation Project. Such activity would put Live Oak Springs in violation of a current Suspension imposed by DWA on Live Oak Springs' Advice Letter (AL) 28-W. AL 28-W is a request to allow truck water sales and set fees in Live Oak Springs' tariff schedule.

Res. W-4799 allows 30 days for Live Oak Springs to respond to this Notice. All trucked water sales are subject to fines described in Res. W-4799 as long as that activity continues without permission of the CPUC. The DWA contact person for this matter is Albert Schiff, at 415-703-2144, email: aas@cpuc.ca.gov

A handwritten signature in cursive script that reads "Albert Schiff".

Albert Schiff
Department of Water and Audits
California Public Utilities Commission

Date of Issuance 10/30/2009

WATER/RSK/JB5/jrb

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Division of Water and Audits

Water and Sewer Advisory Branch

Resolution No. W-4799

October 29, 2009

R E S O L U T I O N

(RES. W-4799), DELEGATION OF AUTHORITY TO STAFF TO ISSUE CITATIONS TO WATER AND SEWER UTILITIES TO ENFORCE COMPLIANCE WITH THE COMMISSION'S ORDERS AND THE PUBLIC UTILITIES CODE; PROCEDURES FOR APPEAL OF CITATIONS

SUMMARY

This resolution delegates authority to Staff, as designated by the Executive Director ("Staff"), for enforcing compliance by water and sewer utilities with the Commission's orders and the Public Utilities Code. Delegating authority to Staff will allow the Commission to promptly respond to threats and protect the public interest from violations of the Commission's Orders and the Public Utilities Code. This program is designed to utilize resources efficiently and enhance overall regulation in California. The Staff will issue citations only after written notice of non-compliance or violation has been given to the water or sewer utility and the water or sewer utility has failed to correct the non-compliance or violation in a timely manner. The Staff is delegated authority to draft and issue citations for specific violations and levy penalties up to amounts set forth in Appendix A.

BACKGROUND

Section 701 of the Public Utilities Code authorizes the Commission to "supervise and regulate every public utility in the State ... and do all things, whether specifically designated in this part or in addition thereto, which are necessary and convenient in the exercise of such power and jurisdiction." More specifically, Section 702 of the Public Utilities Code mandates

Every public utility shall obey and comply with every order, decision, direction, or rule made or prescribed by the commission in the matters specified in this part, or any other matter in any way relating to or affecting its business as a public utility, and shall do everything necessary or proper to secure compliance therewith by all of its officers, agents, and employees.

In turn, under Section 2101 of the Public Utilities Code, the Commission is directed “to see that the provisions of the constitution and statutes of this State affecting public utilities, the enforcement of which is not specifically vested in some other officer or tribunal, are enforced and obeyed” Pursuant to this authority, and under this direction, the Commission has adopted, and at various times amended General Orders 103-A (*Rules Governing Water Service Including Minimum Standards for Operation, Maintenance, Design and Construction*) and 96-B (which includes rules for filing utility tariffs and informational reports).

California law, including Public Utilities Code Section 7, authorizes the Commission to delegate certain powers to its staff, including the investigation of facts preliminary to agency action, and the issuance of citations for particular kinds of violations up to specified amounts, subject to appeal to the Commission. Over the last several years the Commission has delegated citation authority over many kinds of regulated entities including household good movers, charter party carriers, passenger stage corporations, propane gas distribution system operators, power plant operators, telecommunication providers, and energy service providers. This resolution is consistent with these other approved citation programs.

CITATIONS

Before issuing a citation, Staff¹ will issue a written Notice to the water or sewer utility stating the specific violation along with the proposed fine, and information about how to contact Staff. This Notice will provide an opportunity for the utility to cure the violation and also to informally contest to Staff both the determination of a violation and the proposed penalty amount. For violations that do not endanger the public’s health or safety the Notice will provide at least 30 days for the water or sewer utility to either achieve compliance or informally contest Staff’s alleged violation or proposed fine amount. For violations that could endanger the public’s health or safety, the Staff Notice will provide 3 days to comply, or such shorter time as is appropriate under the particular circumstances. For either kind of violation, a utility may request an extension of time to achieve compliance, based on a showing of good cause. Staff should grant such extensions as are reasonable. This resolution authorizes the Staff to issue a citation to any water or sewer utility for violations listed in Appendix A if the utility does not come into compliance by the time stated in the Notice, or any extension thereof. Appendix A contains penalty schedules for specified violations. The penalties are denominated in a dollar amount per “event” and represent the maximum amount that

¹ The term “Staff” refers to the portion of the Commission’s staff designated by the Executive Director to carry out the particular function involved.

can be imposed by a Staff citation. The penalties imposed are the responsibility of shareholders or owner(s) of the water or sewer utility. The fines imposed cannot be charged to customers. Each issuance of a Notice may trigger a separate “event”. Thus, additional penalties may be imposed where a utility fails to cure a continuing violation, but in order for there to be an additional penalty, there must be a separate Notice (with a separate compliance date).

Payment of a citation does not prevent the Commission from taking other remedial measures, including, but not limited to, (i) issuing an order instituting investigation in the event the underlying violation is unresolved or (ii) requiring the payment of monies to third parties.

Authorizing Staff to issue citations for the violations listed in Appendix A has been identified as necessary to fulfill the Commission’s regulatory mandate to ensure that water and sewer utilities provide safe and reliable service at a reasonable rate. Maximum fines are established for each of the listed violations appropriate to the potential harm to the public interest, as well as to ensure compliance with the Commission’s orders and the Public Utilities Code. A water or sewer utility that has been issued a citation may accept the fine imposed or contest it through a process of appeal. The following procedures govern the issuance and appeal of these citations.

1. *Contents.* The citation served upon the water or sewer utility (Respondent) by the Staff will include:

- (a) A specification of each alleged violation, including citation to the statute, rule, or order allegedly violated;
 - (1) while the citation need not include all supporting evidence, Staff will make the evidence available for timely inspection upon request by the Respondent;
- (b) A statement of the facts upon which each alleged violation is based;
- (c) The amount of the fine.
- (d) A statement that the Respondent may pay the amount of the fine set forth in the citation, agree with Staff on conditions for payment, or appeal the citation, and that the Respondent will forfeit the right to appeal the citation by failing to do one of these things within 30 days;
- (e) An explanation of how to file an appeal, including the Respondent’s right to have a hearing, to have a representative at the hearing, to request a transcript, and to request an interpreter; and
- (f) The form for Notice of Appeal and the form for requesting an interpreter.

2. *Service of Citation.* Service of the citation shall be effected either personally on the owner or an officer of the Respondent or by first-class mail. Citations served by first class mail may be sent to the Respondent's business address, or the address for the service of process of the Respondent filed with the Secretary of State of California.

3. *Response.*

(a) Within 30 days after the date of service of the citation, Respondent shall remit payment of the full amount of the fine with notice to Staff, agree with Staff on conditions for payment, or serve a Notice of Appeal upon Staff. Before the expiration of this deadline, Staff, an Administrative Law Judge ("ALJ"), or the Commission may extend the time for response upon a showing of good cause.

(b) Unless otherwise specified, a requirement to notify Staff or serve Staff means to send a written communication by the U.S. Mail or an express mail service to the address specified in the citation. These written communications are not filed with the Commission's Docket Office. In addition to, or instead of, communications by mail service, Staff may allow electronic submissions.

4. *Payment of fine; default.*

(a) Payment of fines shall be submitted to the Commission's Fiscal Office, 505 Van Ness Avenue, San Francisco, CA 94102, in the form of certified check, payable to the Public Utilities Commission for the credit of the State General Fund.

(b) If Respondent pays the full amount of the fine within the time allowed, the citation shall become final. Failure to pay the full amount of the fine or to file a Notice of Appeal will place Respondent in default, the citation shall become final, and the Respondent will have forfeited its right to appeal the citation. A late payment is subject to a penalty of 10 percent.

5. *Appeal.*

(a) An appeal shall be brought by serving a Notice of Appeal upon Staff, and the Respondent shall indicate the grounds for the appeal in the notice.

(b) Upon receipt of a timely Notice of Appeal, Staff shall promptly provide a copy of the Notice of Appeal to the Chief Administrative Law Judge. The Chief Administrative Law Judge shall promptly designate an ALJ to hear the appeal.

- (c) The assigned ALJ shall set the matter for hearing promptly. The Respondent and Staff will be notified at least ten days in advance of the time, date and place for the hearing. The ALJ may, for good cause shown or upon agreement of the parties, grant a reasonable continuance of the hearing.
- (d) Any appeal of a citation shall be heard in the Commission's courtroom in San Francisco or Los Angeles.
- (e) Upon a good faith showing of language difficulty, the Respondent will be entitled to the services of an interpreter at the Commission's expense upon written request to the assigned ALJ not less than three business days prior to the date of the hearing.
- (f) The Respondent may order a transcript of the hearing, and shall pay the cost of the transcript in accordance with the Commission's usual procedures.
- (g) The Respondent may be represented at the hearing by an attorney or other representative, but such representation shall be at the Respondent's sole expense.
- (h) At the hearing, Staff will bear the burden of proof in establishing a violation. Staff will also bear the burden of producing evidence and, therefore, shall open and close. The ALJ may, in his or her discretion, alter the order of presentation. Rule 13.6 (Evidence) of the Commission's Rules of Practice and Procedure is applicable.
- (i) Ordinarily, the appeal will be submitted at the close of the hearing. Upon a showing of good cause, the ALJ may keep the record open for a reasonable period to permit a party to submit additional evidence or argument.
- (j) Within 60 days after the appeal is submitted, the ALJ will issue a draft resolution resolving the appeal. The draft resolution will be placed on the first available agenda, consistent with the Commission's applicable rules. Parties may file comments on the draft resolution pursuant to Rule 14.3 of the Commission's Rules of Practice and Procedure.
- (k) A resolution approved by the Commission is subject to rehearing pursuant to Public Utilities Code Section 1731 and to judicial review pursuant to Public Utilities Code Section 1756.
- (l) During the period described in the next sentence, none of the following may communicate regarding the appeal, orally or in writing, with a Commissioner, Commissioner's advisor, or ALJ: the Respondent, the

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Staff that issued or is enforcing the citation, or any agent or other person on behalf of the Respondent or such Staff. This prohibition applies from the date that Staff receives a Notice of Appeal to and including the date when the period to apply for rehearing of the Commission resolution on the appeal has expired and no application for rehearing has been filed, or if an application for rehearing is filed, the date when the Commission serves the decision finally resolving the application for rehearing. Inquiries strictly limited to procedural matters are permitted.

NOTICE AND COMMENT

A prior draft of this resolution, that did not include a schedule of violations and fines, was mailed to all water and sewer service utilities and other interested parties in accordance with Section 311 of the Public Utilities Code. Comments were allowed under Rule 14.5 of the Commission's Rules of Practice and Procedure. Comments were filed on January 12, 2009 by the California Water Association (CWA). CWA raised concerns over the discretion given Staff in determining what constitutes a violation and then assessing a fine. To address CWA's concerns over the Commission's delegation of authority to Staff, a revised draft resolution was prepared which included a specification of particular violations and associated fines in Appendix A.

The revised draft resolution was mailed to all water and sewer service utilities and other interested parties on April 21, 2009. Comments were served pursuant to Rule 14.5 of the Commission's Rules of Practice and Procedure. Timely comments were received from CWA and the Division of Ratepayer Advocates (DRA) on May 11, 2009. Late-filed comments were received from Garrapata Water Co. Inc. on May 20, 2009 that generally support the comments filed by CWA and DRA. We will accept these late-filed comments.

CWA's comments raise four concerns: (1) the range of violations is inappropriately broad; (2) the penalties are excessive for many of the specified violations; (3) the time limits for curing violations are unduly rigid; and (4) the delegation to Staff is imprecise. With respect to this last concern, CWA requests that references to Staff be replaced by references to "the Director" with this term being defined as referring to the Director of the Division of Water and Audits or its successor.

We decline to adopt this request. We have, however, clarified that the term "Staff" refers to the portion of the Commission's staff designated by the Executive Director for carrying out the particular function involved. The Commission needs the flexibility to designate the Staff most appropriate for carrying out the various functions involved in this citation program.

DRA raises a concern as to why some violations, e.g., certain provisions of General Order 103-A, are not specifically listed in Appendix A. DRA is also concerned about

the rigidity of the fine schedule in Appendix A. DRA states that the compliance period is inappropriate for certain violations, e.g., Rule 1 violations, and that the cure period is unrealistic for other types of violations, e.g., bringing a non-compliant system into compliance. Lastly, DRA requests that the resolution clearly state that penalties imposed are a shareholder (owner) and not a ratepayer responsibility.

We have made several changes to the schedule of violations and penalties in response to comments. Generally, the table of violations and penalties is more specific in areas where our experience has shown that violations are more frequent. Other violations will be handled under the more general provisions of Appendix A, or using an enforcement mechanism other than the citation forfeiture procedure. The absence of a specific violation from the schedule does not mean that a violation is unimportant. It only means that such violations are less frequent or that other enforcement mechanisms are likely to be more suitable.

The most significant change we have made concerns the penalty schedules which have been modified to reduce their “rigidity” and thereby avoid excessive penalties. The penalty amounts shown in Appendix A now represent the maximum fine for a specified violation under the citation program.

The schedule of violations has been amended in a number of areas, including adding a violation for all provisions of General Order 103-A not otherwise specifically listed in Appendix A. We have also eliminated as a violation under the citation program noncompliance with general rate case filing requirements by Class A utilities. This matter is addressed as part of a formal proceeding, and thus not appropriate for resolving under the citation program. Similarly, we have amended the Rule 1 violation to indicate that it is subject to a citation only for violations outside the course of a formal proceeding.

To address a specific concern over the rigidity of the time limits for curing violations, we have clarified the resolution to indicate that the shorter three day compliance period is only for those violations that “could endanger the public’s health or safety.” Generally, we disagree with the concern expressed by both CWA and DRA that the notice period is unduly rigid in the time allowed to come into compliance. The citation program provides that a utility can request an extension of time and that Staff can grant a reasonable extension based on a showing of good cause.

In response to DRA’s concern that certain violations (e.g., Rule 1 violations) are not subject to cure, the 30-day Notice period has been broadened to include an opportunity during this time for a Respondent to informally contest to Staff, both the determination of a violation and the proposed penalty amount, prior to a citation being issued. In this way the 30-day Notice period serves as both an opportunity to cure, where applicable, and informally contest the violation or proposed penalty amount prior to a citation being issued.

In response to DRA's comments on the responsibility for penalties, we have amended the resolution and added a finding to clarify that penalties imposed as part of the citation program are a shareholder (owner) and not a ratepayer responsibility.

We also disagree with CWA's contention that the range of violations listed in Appendix A is "inappropriately broad." CWA's comparison of the Commission's citation program here, covering industries in which we have broad regulatory authority, with our citation program for Load Serving Entities, where our regulatory oversight is limited, is misplaced. The scope of the violations listed in Appendix A is consistent with the scope of our regulatory responsibilities for the water and sewer utility industries.

Finally, both CWA and DRA recommend workshops to discuss the citation program. We do not take CWA and DRA up on their request for workshops. At this time we do not see the benefit of workshops. If, after some experience with the operation of the citation program, specific operational issues arise that would benefit from workshops, we will consider the need for workshops in that context.

FINDINGS

1. Public Utilities Code Section 701 authorizes the Commission to supervise and regulate every public utility in the State.
2. Public Utilities Code Section 702 mandates every public utility to obey and comply with every Commission order, decision, direction, or rule.
3. Public Utilities Code Section 2101 directs the Commission to see that the provisions of the State constitution and statutes dealing with public utilities are enforced and obeyed.
4. California law including Public Utilities Code Section 7 authorizes the Commission to delegate certain powers to its Staff, including the investigation of acts preliminary to agency action, and the issuance of citations for particular kinds of violations up to specified amounts.
5. The proposed citation program for water and sewer utilities described above is needed to ensure effective and efficient enforcement of Commission decisions and orders.
6. The proposed citation program for water and sewer utilities is similar to citation programs adopted by the Commission for other industries.
7. The water and sewer utility citation program as described above and in the Specified Violations and Maximum Penalty Schedules, Appendix A, is reasonable, will facilitate achieving compliance with Commission decisions and orders in protecting the public interest, and will help to deter future violations.
8. In response to comments, the schedule of violations and penalties has been modified, including that the penalty amounts in Appendix A now represent the maximum fine for a specified violation under the citation program.

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9. The scope of violations contained in Appendix A is consistent with the scope of the Commission's broad regulatory responsibilities for the water and sewer utility industries.

10. The Commission needs the flexibility to designate the Staff most appropriate for carrying out the various functions involved in this citation program.

11. Water and sewer utilities will be provided prior written notice to cure or informally contest a violation and proposed penalty amount before a citation is issued.

12. The three day compliance period is only for those violations that could endanger the public's health or safety.

13. Water and sewer utilities may request an extension of time to achieve compliance based on a showing of good cause.

14. The water and sewer utility citation program includes the ability to appeal Staff's issuance of citations and penalties.

15. Payment of a citation does not preclude the Commission from taking other remedial measures.

16. Penalty payments are the responsibility of shareholders or owner(s) of the water or sewer utility and are not to be charged to customers.

17. The value of workshops to discuss the citation program may exist after some experience with the operation of the citation program.

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IT IS ORDERED:

1. The citation program described in the section above entitled "Citations" and in the Specified Violations and Maximum Penalty Schedules, attached as Appendix A, is hereby adopted to govern the issuance and appeal of citations for violation of statutes, orders or rules relating to water and sewer utilities.

2. This resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed, and adopted at a conference of the Public Utilities Commission of the State of California held on October 29, 2009; the following Commissioners voting favorably thereon:

/s/ PAUL CLANON
Paul Clanon
Executive Director

MICHAEL R. PEEVEY
President
DIAN M. GRUENEICH
JOHN A. BOHN
RACHELLE B. CHONG
TIMOTHY ALAN SIMON
Commissioners

APPENDIX A
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SPECIFIED VIOLATIONS AND MAXIMUM PENALTY SCHEDULES

SPECIFIED VIOLATIONS	PENALTY SCHEDULE Class A Utilities UP TO	PENALTY SCHEDULE Class B, C, D, and Sewer Utilities UP TO
Charging fees not authorized by the Commission	\$1,000 per event	\$500 per event
Charging rates higher than authorized	\$1,000 per event	\$500 per event
Not charging developers for special facilities in violation of Tariff Rule 15	\$20,000 per event	\$1,000 per event
Not refunding excess deposits to developers or individual customers in violation of Tariff Rule 15	\$1,000 per event	\$500 per event
Installing new facilities that do not meet the standards or fire flow requirements of G.O. 103-A	\$20,000 per event	\$1,000 per event
Not refunding deposit after 12 months when the customer has met the payment requirements for service pursuant to Tariff Rule 5.C and 7.E	\$500 per event	\$250 per event
Not responding to water outages as specified in Tariff Rule 14 and G.O. 103-A	\$1,000 per event	\$500 per event

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SPECIFIED VIOLATIONS AND MAXIMUM PENALTY SCHEDULES

SPECIFIED VIOLATIONS	PENALTY SCHEDULE Class A Utilities UP TO	PENALTY SCHEDULE Class B, C, D, and Sewer Utilities UP TO
Not following safety standards when doing repairs as specified in G.O. 103-A	\$1,000 per event	\$500 per event
Not restoring the work area specified in G.O. 103-A after performing repairs	\$1,000 per event	\$500 per event
Shutting off a customer's water for non-payment of bill without the notice required by Tariff Rule 11.B.1.i	\$1,000 per event	\$500 per event
Not complying with Commission Ordering Paragraphs not otherwise specified herein	\$10,000 per event	\$1,000 per event
Misrepresenting information outside the course of a formal proceeding in violation of Rule 1	\$20,000 per event	\$2,000 per event
Failing to remedy defects or failing to file a required report on time or at all, in violation of Rule 6.2 of G.O. 96-B	\$1,000 per event	\$500 per event

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SPECIFIED VIOLATIONS AND MAXIMUM PENALTY SCHEDULES

SPECIFIED VIOLATIONS	PENALTY SCHEDULE Class A Utilities UP TO	PENALTY SCHEDULE Class B, C, D, and Sewer Utilities UP TO
Failing to submit a timely or satisfactory revision to a tariff effective pending disposition after notice by the Division of Water and Audits, in violation of Rule 7.5.3 of G.O. 96-B	\$1,000 per event	\$500 per event
Not keeping records of customer complaints in accordance with Section VII.7.E of G.O. 103-A	\$1,000 per event	\$500 per event
Not complying with Water Quality Standards in accordance with Section II.2.A of G.O. 103-A	\$1,000 per event	\$500 per event
Not complying with water pressure requirements of Section VII.6.A of G.O. 103-A	\$1,000 per event	\$500 per event
Not complying with water supply requirements of Section II.2.B.3 of G.O. 103-A	\$2,000 per event	\$1,000 per event
Non-compliance with provisions of G.O. 103-A not otherwise specified herein	\$1,000 per event	\$500 per event
Not filing Annual Reports	\$1,000 per event	\$500 per event

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SPECIFIED VIOLATIONS AND MAXIMUM PENALTY SCHEDULES

SPECIFIED VIOLATIONS	PENALTY SCHEDULE Class A Utilities UP TO	PENALTY SCHEDULE Class B, C, D, and Sewer Utilities UP TO
Misusing or misappropriating the Safe Drinking Water Bond Act and Safe Drinking Water State Revolving Fund surcharge funds collected from customers	\$20,000 per event	\$2,000 per event
Not complying with the Commission's filing requirements for general rate cases as specified in Standard Practice U-46-W	These matters are handled by the assigned ALJ for Class A utility rate cases	\$1,000 per event

(End of Appendix A)

EXHIBIT

9

Decision 13-07-036 July 25, 2013

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation on the Commission's Own Motion into the Operations and Practices of Live Oaks Springs Water & Power Company (U390W), and its Owner/Operator, Nazar B. Najor; Notice of Opportunity for Hearing; and Order to Show Cause Why the Commission Should not Petition the San Diego County Superior Court for a Receiver to Assume Possession and Operation of the Live Oaks Springs Water & Power Company pursuant to the California Public Utilities Code section 855. Other Named Respondents include City National Bank, Live Oak Holding, LLC, a Nevada Limited Liability Company; Matthew Semmer, Receiver for City National Bank.

Investigation 12-08-004
(Filed August 2, 2012)

(Appendix A contains the list of respondents to this Investigation, as modified and corrected by Decision 13-03-010.)

MODIFIED PRESIDING OFFICER'S DECISION AUTHORIZING SUPERIOR COURT ACTION FOR APPOINTMENT OF A RECEIVER FOR LIVE OAK SPRINGS WATER COMPANY

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MODIFIED PRESIDING OFFICER'S DECISION AUTHORIZING SUPERIOR COURT ACTION FOR APPOINTMENT OF A RECEIVER FOR LIVE OAK SPRINGS WATER COMPANY

1. Summary

This decision authorizes and directs the Commission's Legal Division to commence proceedings in the Superior Court of San Diego County for appointment of a receiver to take possession of and operate Live Oak Springs Water Company (Live Oak), pursuant to Public Utilities Code Section 855.¹ Upon the Superior Court's appointment of a receiver for Live Oak, the receiver shall expeditiously obtain the services of a licensed land surveyor to prepare and record in the San Diego Recorder's Office a record of survey delineating Live Oak water utility real property. This decision also voids the collateralization of Live Oak public utility property used to collateralize a loan between Live Oak Holding, LLC and 1st Pacific Bank of California.

¹ Public Utilities Code Section 855 provides that whenever the commission determines, after notice and hearing, that any water or sewer system corporation is unable or unwilling to adequately serve its ratepayers or has been actually or effectively abandoned by its owners, or is unresponsive to the rules or orders of the commission, the commission may petition the superior court for the county within which the corporation has its principal office or place of business for the appointment of a receiver to assume possession of its property and to operate its system upon such terms and conditions as the court shall prescribe. The court shall provide for disposition of the facilities and system in like manner as any other receivership proceeding in this state.

2. Procedural Background

Live Oak Springs Water Company (Live Oak) is a Class D water utility providing public utility water service to 95 customers in the unincorporated community of Boulevard in southeastern San Diego County.²

This investigation into the operations and practices of Live Oak was opened in response to a foreclosure proceeding in Superior Court of San Diego County involving a \$1.5 million loan collateralized with Live Oak public utility assets.³

The assigned Commissioner's September 25, 2012 scoping memo and ruling identified seven issues to be addressed in this proceeding. These issues are:

- (1) Identification of the owners of Live Oak and determination of whether its owners and manager are fit to continue owning and operating the public utility or whether a receiver should be appointed to assume operations until a responsible owner can be found to assume operations of the public utility, pursuant to Section 855 of the Public Utilities Code;⁴
- (2) Whether a \$1.5 million loan instrument is void or valid with regard to the assets and collateral of Live Oak;

² Exhibit 18 of Exhibit 2.

³ *City National Bank v. Live Oak Holding, LLC, et al.* (Live Oak Holding Judicial Foreclosure Action) Superior Court of California, County of San Diego East County Division Case No. 37-2012-00065199-CU-MC-EC.

⁴ All statutory references are to the Public Utilities Code unless otherwise stated.

- (3) Identification of actions that Receiver Semmer⁵ and/or City National Bank (CNB) took regarding Live Oak and appropriateness of such actions;
- (4) Whether Receiver Semmer and/or CNB, either de facto or de jure, became an owner or operator of the public utility;
- (5) Whether any of the named respondents should be dismissed from this proceeding or additional respondents should be added;
- (6) If violations are found, whether Live Oak should be fined pursuant to Section 2107 and 2108; and,
- (7) If violations are found whether, and to what extent, other remedies should be imposed.

The third and fourth issues, as they relate to Receiver Semmer and the fifth issue were resolved by Decision (D.) 12-03-010. The remaining issues are addressed in this decision.

This proceeding was submitted on March 18, 2013 upon the receipt of reply briefs. New testimony introduced in opening and reply briefs was not considered, consistent with the Presiding Officer's January 11, 2013 ruling at the conclusion of the evidentiary hearing. The last day for receipt of evidentiary testimony was January 11, 2013.

⁵ Receiver Semmer was identified in the Order Instituting Investigation as a receiver for City National Bank. However, it was subsequently clarified in an October 12, 2012 joint stipulation and by D.13-03-010 that Semmer was appointed receiver by the Superior Court of San Diego County and restricted to the control of Live Oak Holding, LLC. Semmer was dismissed as a respondent to this investigation.

3. Issue #1 - Ownership of Live Oak

Section 851 prohibits a public utility from a selling, leasing, assigning, mortgaging, or encumbering public utility property without first having secured an order from the Commission. Section 825 voids all evidence of interest or ownership of a public utility that is issued without an order of the Commission authorizing the issue thereof. Since 1978, there have been several authorized and unauthorized changes in the ownership of Live Oak. A current ownership chart of Live Oak as approved by the Commission is attached as Appendix B to this decision.

3.1. First Authorized Transfer

On February 27, 1979, the Commission authorized Samuel Krauth and Eleanor Krauth to acquire ownership and to operate Live Oak Springs Water & Power Company (Live Oak's predecessor) from Live Oak Partners, effective March 29, 1979. This acquisition of ownership was part of a larger transaction involving a motel, lodge, bar, restaurant, and a substantial parcel of land.⁶

3.2. Second Authorized Transfer

In July of 1982, the Krauths transferred their ownership interest in Live Oak Springs Water & Power Company *without* Commission approval to Elia Najor, doing business as Live Oak Springs Management Corporation. In addition to the water utility, that transfer of ownership included a general store, restaurant, resort facilities and all other properties owned by Krauths at Live Oak Springs. In 1983 Elia Najor's attorney advised the Commission that an application for approval of the transfer would be filed.

⁶ See D.89999, dated February 27, 1979.

Elia Najor operated the water utility for eight years under the name of Live Oak before filing Application (A.) 90-10-058 with the Commission in 1990 seeking authority to acquire Live Oak Springs Water & Power Company from the Krauths.⁷ Elia Najor's son Nazar Najor managed the water utility for six years prior to the filing of A.90-10-058.⁸ That application described the water system to consist of: (a) 20 acres of land; (b) two wells; (c) a 20,000 gallon water storage facility; (d) two pumps; (e) 21,000 feet of water mains; (f) 138 services; (g) 94 meters; (h) six fire hydrants; (i) vehicles; and, (j) office equipment.⁹ Although a hearing on this matter was concluded on June 28, 1991 it was submitted a year later on May 15, 1992 upon the receipt of additional information concerning title to the water system.¹⁰

The 1982 unauthorized transfer of ownership of the water utility, including all public utility rights and obligations of Live Oak was approved by the Commission, effective September 2, 1992.¹¹ Nazar Najor continued to manage the water utility.¹² However, the Commission's approval was subject to certain conditions. One of the conditions required Elia Najor to conduct and account for all water utility business under the name of Live Oak. Another condition,

⁷ Elia Najor's attorney and both Krauths were deceased at the time this application was filed with the Commission.

⁸ Exhibit 20 of Exhibit 2 at 3.

⁹ *Id.* at 2.

¹⁰ 45 CPUC 2d (1992), D.92-09-001 at 400.

¹¹ *Id.* at 401-402.

¹² *Id.* at 3.

apparently resulting from the receipt of information concerning title to the water system, required Elia Najor to “obtain the services of a licensed land surveyor to prepare and record in the San Diego County Recorder’s Office a record of survey delineating the boundaries [real property] of all water company operating property; applicant shall record such survey within 90 days after the effective date of the order of the order approving the transfer.”¹³ However, this condition was not satisfied and remains outstanding.¹⁴ Although public utility fixtures and equipment comingled with the other acquired business interests (general store, restaurant and resort facilities) were transferred to Live Oak, public utility real property remained comingled with the other business interests. Even though Nazar Najor managed the water utility for six years prior to the land survey requirement and continued to manage the water utility subsequent to the land survey requirement, he did not follow through on this requirement because “I had other businesses that I ran. I didn’t run that part of it.”¹⁵

3.3. Third Authorized Transfer

On May 29, 2007, Elia Najor (93 years old and unable to run the water utility) filed A.07-05-032 for authority to sell and transfer ownership of Live Oak to Dan Najor, Ramsey Najor and Lauren Najor (sons and daughter-in-law) under the name of Live Oak Enterprises, LLC (Live Oak Enterprises).

¹³ Other conditions included the initiation of a system improvements project to bring the water utility into compliance with General Order 103, and receipt of Commission approval prior to adding new service connections.

¹⁴ Reporter’s Transcript, Volume 2, at 181 lines 25 to 182 line 14.

¹⁵ *Id.* at 182 lines 15-20.

Live Oak Enterprises, registered to do business in San Diego County as Live Oak, is a California limited liability company wholly-owned by Live Oak Holding, LLC (Live Oak Holding), a Nevada limited liability company.¹⁶ Nazar Najor would continue to manage the water utility.¹⁷

The application described the proposed transfer of the water system to consist of: (a) two wells; (b) one pump; (c) two water storage facilities with a total capacity of 60,000 gallons; (d) 16,437 feet of water mains; (e) 96 meters; (f) six fire hydrants; (g) vehicles; and (h) office equipment.¹⁸ Contrary to the transfer of 20 acres of land as part of the prior Commission-authorized change in ownership of the water utility there would be no transfer in ownership of land as part of this application.¹⁹

This uncontested application to sell and transfer ownership of Live Oak to Live Oak Enterprises, LLC (Dan Najor, Ramsey Najor and Lauren Najor) from Elia Najor doing business as Live Oak was approved by D.08-09-008 on September 4, 2008.

¹⁶ Exhibit F to a Motion of the Division of Water and Audits at 2, dated December 13, 2012 (Motion of DWA).

¹⁷ Application 07-05-032 at 3 and 4.

¹⁸ *Id.* at 2 and 3.

¹⁹ *Id.* at 2.

3.4. Other Ownership Transfers of Live Oak

The Division of Water and Audits (DWA) testified that the ownership and/or transfer of public utility assets of Live Oak have been transferred at least three times without Commission authorization in violation of Sections 818 and 851.²⁰

The first unauthorized transfer identified by DWA occurred as early as 2001.²¹ This unauthorized transfer related to the transfer of real property from Elia Najor doing business as Live Oak Springs Management Corporation to Live Oak Management Corporation.

The second unauthorized transfer identified by DWA occurred on July 5, 2006 when Live Oak Management transferred real property to Live Oak Holding by Corporation Quitclaim Deed, consisting of 22 Assessor Parcel Numbers (APNs).²² Five of these APNs (APN 609-050-03, 609-050-06, 609-071-01, 609-086-03, and 609-090-07) were identified to be land parcels necessary to the public utility water operations.²³

The third unauthorized transfer identified by DWA occurred between September 4, 2008 (date Commission authorized the three individuals to acquire Live Oak as Live Oak Enterprises) and December 19, 2008 (the date Live Oak Enterprises submitted a limited liability statement of information to the

²⁰ Exhibit 2 at 22.

²¹ *Id.*

²² Exhibit 7 to October 12, 2012 Joint Stipulation of Fact and Procedural History (Joint Stipulation).

²³ Exhibit B at 1-2 to Motion of DWA and Late Filed Exhibit A.

California Secretary of State).²⁴ The partial change in ownership resulted in replacing Lauren Najor (one of three persons authorized by the Commission to acquire Live Oak pursuant to D.08-09-008) with her husband, Nazar Najor.

3.5. Discussion

Pursuant to D.08-09-008, the current authorized owner of Live Oak is Live Oak Holding doing business in California as Live Oak Enterprises, a limited liability entity owned by partners Daniel B. Najor, Ramsey L. Najor, and Lauren P. Najor. Having identified the current ownership of Live Oak as recognized by the Commission, we address the unauthorized ownership transfers of Live Oak and public utility real property that we are aware of.

3.5.1. Unauthorized Transfer of Ownership

The most recently known change in ownership of Live Oak Enterprises took place in 2008 when Nazar Najor acquired Lauren Najor's (wife of Nazar) partnership share of Live Oak Enterprises, a violation of Section 854(a) which prohibits any person, whether or not organized under the laws of this state, shall acquire, or control either directly or indirectly any public utility organized and doing business in this state without first securing authorization to do so from the Commission.

A comparison of Live Oak Enterprises' August 15, 2008 California Secretary of State Statement of Information filing with its December 19, 2008 filing substantiates that Lauren Najor relinquished her ownership share to Nazar Najor.²⁵ A review of Live Oak Holding's 2006 through 2011 federal tax returns,

²⁴ Exhibit H to Motion of DWAs.

²⁵ Exhibits I and J to Motion of DWA.

which shows that Lauren Najor's partnership interest ceased to exist in 2008 and Nazar Najor's partnership interest began corroborates that this change did take place without Commission authorization.²⁶ This unauthorized change in ownership is further confirmed by Nazar Najor, himself, in his testimony before the Superior Court of San Diego County on July 17, 2012. He testified that Live Oak is owned by himself and his two brothers, Daniel and Ramsey.²⁷ This unauthorized change in ownership of Live Oak is not currently recognized by the Commission.

The next unauthorized change in ownership occurred in 2007 when Live Oak Holding doing business in California as Live Oak Enterprises took control of Live Oak prematurely. Live Oak's 2007 Annual Report to the Commission, signed under penalty of perjury by Nazar Najor on May 13, 2008, identifies Live Oak Holding as doing business as Live Oak in 2007.²⁸ This occurred prior to the September 5, 2008 issuance of D.08-09-008 authorizing Live Oak Enterprises to acquire ownership of Live Oak.²⁹ This premature ownership of Live Oak is corroborated by a published fictitious business name statement of Live Oak Enterprises in the June 14, 21, 28 and July 5, 2007 issues of the Alpine Sun newspaper, which was filed in the Office of the Recorder/County

²⁶ Sealed Exhibit 2.

²⁷ Exhibit 9 of Exhibit 1 at 8.

²⁸ Exhibit 14 of Exhibit 2 at 3.

²⁹ While Live Oak Holding is registered with the California Secretary of State to do business in California as Live Oak Enterprises, the application and commission decision makes no mention of Live Oak Holding owning Live Oak Enterprises. Daniel Najor, Ramsey Najor and Lauren Najor are the identified owners of Live Oak Enterprises.

Clerk of San Diego County.³⁰ That publication identifies June 4, 2007 as Live Oak Enterprises' first day of doing business under the name Live Oak, approximately fourteen months prior to Commission authorization.

Live Oak Enterprises' registration to do business in San Diego County as Live Oak expired on June 4, 2012 and has not been renewed, as reported in the San Diego County's Assessor/Recorder/County Clerk web site www.sdarcc.com identifying fictitious names, of which official notice is taken.

Another unauthorized transfer of Live Oak ownership involves Live Oak Management Corporation prior to 2007 and subsequent to 1993.³¹ A Live Oak Management Corporation April 3, 2003 State of California Statement of Information filing with the California Secretary of State identified Nazar Najor and Ramsey Najor as owners of Live Oak Management Corporation.³² Specifically, a January 30, 2006 preliminary title report references a lien for unsecured property taxes filed by the tax collector of San Diego County in 2003 for Live Oak Management Corporation doing business as Live Oak Springs Water & Power.³³ Also, Live Oak's 2005 Annual Report, signed by Nazar Najor on February 10, 2006 under penalty of perjury, identifies Nazar Najor and Ramsey Najor as owners of Live Oak.³⁴ Nazar Najor subsequently confirmed in

³⁰ Exhibit 5 of Exhibit 4.

³¹ DWA identified two separate instances ownership changes involving Live Oak Management Corporation, one involving the transfer of Live Oak's real property and the other involving Live Oak operations.

³² Exhibit L of Motion of DWA.

³³ Exhibit 25 of Exhibit 2 at 58.

³⁴ Exhibit 21 of Exhibit 2 at 4.

his November 30, 2012 testimony in Superior Court of San Diego that Live Oak was working under Live Oak Management Corporation.³⁵ However, Live Oak Management Corporation was suspended by the California State Franchise Tax Board on August 1, 2007, the suspension of which remains in effect.³⁶ In 2007 all the assets of Live Oak Springs Management Corporation were transferred into Live Oak Holding.³⁷

The earliest unauthorized change in ownership of Live Oak occurred in 1993, shortly after D.92-09-001 was issued authorizing Elia Najor, doing business as Live Oak Springs Management Corporation,³⁸ to acquire ownership of Live Oak. An acceptance letter filed on February 10, 1993 in compliance with Ordering Paragraph 2 of that decision identified Elia Najor, Ramsey Najor and Nazar Najor as equal partners in Live Oak.³⁹ Approximately one year earlier, on December 13, 1991 Live Oak filed a fictitious business name statement with the San Diego County Recorder identifying Elia Najor and Nazar Najor doing business as Live Oak.⁴⁰

³⁵ Exhibit D at 11 of Motion of DWA.

³⁶ Exhibit O at 1 to Motion of DWA.

³⁷ Exhibit 24 of Exhibit 2 at 3.

³⁸ Live Oak *Springs* Management Corporation is not synonymous with Live Oak *Management* Corporation.

³⁹ Exhibit K to Motion of DWA.

⁴⁰ Exhibit K to Motion of DWA.

3.5.2. Unauthorized Transfer of Public Utility Real Property

Nazar Najor contends that Live Oak has been providing public utility water service for the past 80 years without owning any real property and does not need any real property whatsoever to provide public utility water service.⁴¹ Nazar Najor represents that a 1943 blanket easement relieves the need for Live Oak to own any real property.⁴² However, the evidence in this proceeding substantiates that Live Oak owned and should continue to own real property. For example:

- Various unidentified real property parcels were transferred between the Krauths and Live Oak between April 2, 1979 and November 19, 1979.⁴³
- The Krauths transferred title for Real Property Assessor's Parcel Number (APN) 606-050-03 back to Live Oak on November 19, 1979.⁴⁴
- Twenty acres of land was identified as part of Live Oak in an October 23, 1990 filing of A.90-10-058 seeking authority for Elia Najor to acquire Live Oak.⁴⁵
- Live Oak transferred title for APN 606-050-03 to Live Oak Management Corporation on May 22, 1991.⁴⁶

⁴¹ Reporter's Transcript, Volume 1, at 124 lines 10-16, at 126 lines 13-17, at 127 lines 14-18, at 147 lines 18-20; and Reporter's Transcript, Volume 2, at 196 lines 7-12.

⁴² Reporter's Transcript, Volume 2, at 246 lines 3-16.

⁴³ Exhibit 2 of Exhibit 4 at 1.

⁴⁴ *Id.*

⁴⁵ Exhibit 20 of Exhibit 2 at 3.

⁴⁶ Exhibit 2 of Exhibit 4 at 2.

- D.92-09-001 identified a two-acre parcel of land APN 609-050-03-00 as being a two-acre parcel of land part of the public utility water system.⁴⁷
- A January 6, 2006 property appraisal identified property purchased in 1984, including APN 609-050-03-00, to be vested with Live Oak Management Corporation.⁴⁸
- A Blanket Easement only provides an easement for installing a water distribution system and electrical transmission system in, upon or over all streets, road or highways.⁴⁹

Prior to the Najor family members acquiring Live Oak, the Krauths acquired Live Oak in 1978 as part of a larger transaction involving a motel, lodge, bar, restaurant, and a substantial parcel of land.⁵⁰ Hence, the Live Oak public utility business was comingled with the other acquired business interests. Elia Najor acquired ownership of all the business interests of the Krauths at Live Oak Springs in 1982, including Live Oak without Commission authorization.

Elia Najor filed an application with the Commission in 1990, eight years later, to obtain Commission authorization to acquire Live Oak and to provide public utility water service. A Commission staff investigation of the public utility water operations discovered the non-public utility business interests that Elia Najor acquired from the Krauths were comingled with the public utility

⁴⁷ 45 CPUC 2d, D.92-09-001 at 400.

⁴⁸ Exhibit 26 of Exhibit 2 at 5.

⁴⁹ Exhibit 25 of Exhibit 2 at 48.

⁵⁰ D.89999, dated February 27, 1979.

water operations. The Commission staff recommended and Elia Najor agreed to separate the public utility water operations from the other business interests acquired from the Krauths.⁵¹ The Commission then ordered Elia Najor to obtain the services of a licensed land surveyor to prepare and record in the San Diego County's Recorder's Office a record of survey delineating the boundaries of all water company property.⁵² This land survey requirement was apparently ordered to separate Live Oak operations from the other acquired business interests. However, the land survey and recording of the results in the San Diego County's Recorder's Office never took place.

3.5.3. Need to Appoint a Receiver

Since 1982, when a Najor family member first acquired Live Oak without Commission authorization, ownership of Live Oak by various members of the Najor family have continually ignored and been unresponsive to the Commission's rules and orders, as detailed in the prior discussion of the ownership and public utility property of Live Oak.

Had Live Oak complied with the Commission's D.92-09-001 order to obtain the services of a licensed land surveyor to prepare and record a record of survey delineating the boundaries of all water company operating property, there would be no dispute on what property should be in the name of Live Oak. However, absent a land survey it is impossible to determine what real property should have been transferred to Live Oak as public utility property at the time

⁵¹ 45 CPUC 2d, D.92-09-001 at 401.

⁵² *Id.*

Elia Najor acquired Live Oak from the Krauths and what real property should remain public utility water property.

The Najor family's inability to operate the public utility water utility is further demonstrated by a history of their non-compliance with the County of San Diego's Department of Environmental Health, Small Drinking Water System Division (DEH) environmental health permitting and water quality requirements. For example, DEH issued numerous Compliance Orders to Live Oak, five of which, dated September 19, 2011, October 9, 2009, June 3, 2009, December 8, 2005, and November 10, 2005, were received into evidence for violations of, or for, among other things, California's Safe Drinking Water Act, overdue water quality testing, expiration of required annual public health permit, and bacteriological total coliform violations.⁵³ Since May of 2012, Live Oak has and continues to provide public utility water service without a required environmental health permit.⁵⁴ There has also been repetitive late compliance of health and safety rules for lead and copper testing of drinking water, previously resulted in a 2009 violation for late compliance and is currently over-due.⁵⁵ Further, in 2007 Live Oak was found guilty of violating Penal Code Section 470(d) by submitting a falsified lab report to DEH.⁵⁶

⁵³ Exhibit 10.

⁵⁴ Exhibit 3 at 8.

⁵⁵ Reporter's Transcript, Volume 2, at 264 lines 22-25.

⁵⁶ Exhibit 3 at 8-9.

Live Oak's unresponsiveness to Commission rules and orders, inability to timely comply with DEH requirements, and falsification of lab reports puts the health and safety of Live Oak's public utility water customers at risk and substantiates Live Oak's inability to adequately serve its public utility water customers.

The sales and transfers of Live Oak and its real property, including public utility real property comingled with the other business interests of the Krauths acquired by Elia Najor and subsequently transferred to various non-public utility entities that took place without Commission authorization are null and void, pursuant to Section 851. The Commission should petition the Superior Court of San Diego County for the appointment of a receiver to assume possession of its property and to operate its system, pursuant to Section 855. The appointed receiver should expeditiously obtain the services of a licensed land surveyor to prepare and record in the San Diego Recorder's Office a record of survey delineating Live Oak's real property.

4. Issue # 2 - \$1.5 Million Loan Instrument

Live Oak Holding and 1st Pacific Bank of California (1st Pacific) entered into a Business Loan Agreement on July 5, 2006 with a maturity date of July 5, 2009.⁵⁷ Pursuant to that Business Loan Agreement, 1st Pacific agreed to loan Live Oak Holding \$1.5 million (the Loan).

⁵⁷ Two extensions of time were agreed to between Live Oak Holding and 1st Pacific. Effective July 5, 2009 the maturity date was extended to December 5, 2009 and effective December 5, 2009 the effective date was extended to April 5, 2010.

On July 5, 2006, Live Oak Holding also executed, delivered, and recorded a Deed of Trust to 1st Pacific for property commonly known as 37820 Old Highway 80, Boulevard, California (same address as Live Oak) as security for the Loan. The Deed of Trust identifies 22 APNs, five of which are identical to the APNs identified by Live Oak as having public utility water property and one of which is identical to the APN identified in D.92-09-001 as being part of the Live Oak water system.⁵⁸ The Deed of Trust also conveys and grants:

For valuable consideration, [Live Oak Holding] irrevocably grants, transfers, and assigns to [1st Pacific] in trust, with power of sale, for the benefit of [1st Pacific] as Beneficiary, all of [Live Oak Holding's] right, title, and interest in and to the following described real property, together with all existing or subsequently erected or affixed buildings, improvements and fixtures; all assessments, right of way, and appurtenances; all water, water rights and ditch rights including stock in utilities with ditch or irrigation rights; and all other rights, royalties, and profits relating to the real property, including without limitation all minerals, oil, gas, geothermal and similar matters (the real Property) located in San Diego County, State of California.

The Business Loan Agreement identified Live Oak Holding as a limited liability company organized under the laws of Nevada and identifies Live Oak Enterprises LLC, also organized under the laws of Nevada, as the only other assumed business name used by Live Oak Holding. Although Live Oak Enterprises is qualified to do business in California as a Nevada (foreign) entity,

⁵⁸ See Late Filed Exhibit A, Exhibit 4 of Joint Stipulation and D.92-09-001 (45 CPUC 2d at 400).

a review of the Nevada Secretary of State web site at www.nvsos.gov/sosentitysearch has no record of a Live Oak Enterprises limited liability entity (of which official notice is taken). Four guarantors are identified in the Business Loan Agreement: Daniel B. Najor, Nazar E. Najor, Ramsey Najor, and Live Oak Management Corporation, each of which executed a commercial guarantee.⁵⁹ Live Oak Management Corporation's commercial guarantee was signed by Nazar Najor and Ramsey Najor. Live Oak Management Corporation also granted real property with the same 22 APNs referenced in the Deed of Trust to Live Oak Holding via a Corporation Quitclaim Deed.⁶⁰

In conjunction with the Loan, Live Oak Holding executed and delivered an Assignment of Rents that was recorded in the official records of the San Diego County Recorder's Office. Pursuant to the Assignment of Rents, upon default the Bank has the right to have a receiver appointed to take possession of the Property with the power to protect and preserve the Property, operate the Property preceding foreclosure or sale, and to collect rents from the Property and apply the proceeds against the amounts due to the Bank.⁶¹

On May 7, 2010, 1st Pacific was closed by the California Department of Financial Institutions, and the Federal Deposit Insurance Corporation (FDIC) was named receiver.

⁵⁹ Exhibit 5 of Joint Stipulation.

⁶⁰ Exhibit 7 of Joint Stipulation.

⁶¹ Exhibit 6 of Joint Stipulation.

4.1. City National Bank

CNB acquired certain assets of 1st Pacific from the FDIC on the same date that the FDIC was named receiver. The assets acquired included the Loan and CNB succeeded to all of 1st Pacific's rights, title and interest under the Loan. On July 16, 2010, CNB sent a letter of agreement to Live Oak Holding, Live Oak Enterprises, Live Oak Management Corporation, Daniel Najor, Nazar Najor, and Ramsey Najor proposing to forebear from instituting collection efforts on the Loan in exchange for a general release and other consideration from Live Oak Holding. On August 24, 2010, Live Oak Holding and guarantors executed the Forbearance Agreement. Live Oak Holding has defaulted and on February 17, 2011, CNB served and recorded a Notice of Default and Election to Sell under Deed of Trust, including the 22 parcels of land. As of October 5, 2012, the amount of unpaid principal and interest owed to CNB is \$1,889,256.28.⁶² Fees, expenses, and interest continue to accrue.

4.2. Division of Water and Audits

The Division of Water and Audits (DWA) testified that Live Oak Holding owned Live Oak when the Loan was executed in July of 2006. DWA also testified that Live Oak Holding controlled real property used for public utility purposes and pledged it as collateral for the Loan. Although DWA acknowledges that these unauthorized transactions should be null and void pursuant to Sections 825 and 851, it recommends that the Commission not exercise its authority under those sections.⁶³ Instead, it recommends that the

⁶² Joint Stipulation at 8.

⁶³ Section 825, among other matters, voids all evidence of indebtedness issued without an order of the commission authorizing an issuance of indebtedness. Section 851

Footnote continued on next page

Commission find that the Loan and encumbrance of utility property are valid in this case due to the convoluted and complex history surrounding ownership of the water utility as chronicled in the Joint Stipulations, DWA's Motion to Amend the OII, and addressed in its prepared testimony (Exhibit 2).

DWA concludes that Live Oak Holding should be required to abide by the contractual terms that it agreed to in the Business Loan Agreements, Promissory Note, Deed of Trust, Commercial Guaranties, Change in Terms Agreements, Forbearance Agreement and all other documents executed in connection with the Loan by Live Oak Holding, Live Oak Management, Daniel Najor, Ramsey Najor, and Nazar Najor with 1st Pacific, and later CNB, between July 5, 2006 and August 24, 2010.

DWA also recommends that upon the sale of Live Oak to a new owner by a Commission nominated receiver, the proceeds of the sale of the utility's property (all water plant in-service assets and real property necessary to operate the utility) go to CNB as partial repayment for the Loan.⁶⁴

4.3. Discussion

The Loan of 1st Pacific to Live Oak Holding originated on July 5, 2006, approximately fourteen months before the Commission authorized Live Oak Enterprises, an unregistered Nevada entity qualified to do business in California, to acquire Live Oak. Live Oak Holding is identified to be doing business in California by all parties to this investigation, even though Live Oak Enterprises'

precludes a public utility from disposing of, or encumbering the whole or any part of public utility property necessary or useful in the performance of its duties to the public without first having secured an order from the commission.

⁶⁴ Exhibit 3 at 2.

application (A.07-05-032) to acquire ownership of Live Oak identified Daniel B. Najor, Ramsey Najor and Lauren Najor as owners of Live Oak Enterprises.

The Loan was collateralized by Daniel B. Najor, Nazar E. Najor, Ramsey Najor and Live Oak Management Corporation on the same date the Loan was issued. Included in the Loan collateralization were 22 APNs, some of which included real property known to have been previously owned by Live Oak and real property used for public utility purposes that were comingled with other business interests (general store, restaurant and resort facilities) without Commission authorization.

Although evidence identified in the prior unauthorized transfer of ownership discussion identifies Live Oak Holding as holding itself out to be doing business as Live Oak in 2007, it had no Commission authority to do so until September 4, 2008. Any transactions, including collateralization of real property, undertaken by Live Oak Holding involving public utility property prior to September 4, 2008 are null and void pursuant to Sections 825 and 851. DWA's request to find that the Loan and encumbrance of utility property are valid is denied.

CNB acquired the Loan from the FDIC due to the FDIC's closing of 1st Pacific. Since the Loan is null and void as it relates to public utility property, it is inappropriate to require the proceeds of any sale of Live Oak to go to CNB as partial repayment for the Loan, as recommended by DWA. However, it is appropriate for CNB to seek remedies against the guarantors to the extent that such remedies do not include public utility property acquired without Commission authorization.

5. Issue # 3 - Actions Taken by City National Bank

CNB became an interested party in the assets of Live Oak on May 7, 2010 when it acquired the rights, title, and interest of 1st Pacific's Loan to Live Oak Holding.⁶⁵ Actions taken by CNB since its acquisition of the Loan is summarized in Section 4.1 of this discussion. Issues regarding the Defaulted Loan are pending in Superior Court of San Diego County.

6. Issue # 4 – Public Utility Involvement by City National Bank

While CNB seeks to collect on the Loan by obtaining a judgment from Superior Court enforcing the guarantees against the Guarantors, CNB is merely the plaintiff in the judicial foreclosure action. CNB has not taken possession, custody or control of Live Oak.⁶⁶ CNB was not and is not an owner or operator of Live Oak public utility property.

7. Issue # 6 and # 7– Penalties, Fines, Other Remedies

DWA recommends that the Commission impose penalties and fines in excess of \$1 million on Live Oak Holding and all of the individuals responsible for violations of Public Utilities Code sections and other Commission requirements, as detailed in Attachment A of its reply brief.

Pursuant to Section 2107, any public utility which violates or fails to comply with any part of an order, decision, decree, rule, direction, demand, or requirement of the Commission is subject to a penalty of not less than five hundred dollars (\$500), nor more than fifty thousand dollars (\$50,000) for each

⁶⁵ Joint Stipulations at 7.

⁶⁶ Exhibit 1 at 6.

offense. For every violation of any part of any order, decision, decree, rule, direction, demand, or requirement of the Commission by any corporation or person is a separate and distinct offense, and in case of a continuing violation each day's continuance thereof shall be a separate and distinct offense, pursuant to Section 2108.

D.98-12-075 set forth five factors to be considered in assessing a penalty. Those factors involve an analysis of: 1) the severity of offense; 2) the conduct of the utility; 3) the financial resources of the utility; 4) the totality of circumstances; and 5) the role of precedent.⁶⁷

The record regarding the severity of the offenses, conduct of the utility, and totality of circumstances would support a substantial penalty. However, it is difficult to justify a penalty absent an evidentiary hearing to provide each individual entity and person an opportunity to justify why they should not be assessed fines and penalties, and based on the financial resources factor. The loss of ownership of Live Oak far outweighs the holding of additional evidentiary hearings to determine the appropriateness of assessing fines and penalties and is in the public interest. The appropriate remedy in this instance is the assignment of a receiver. A penalty should not be assessed at this time.

8. Assignment of Proceeding

Catherine J.K. Sandoval is the assigned Commissioner and Michael J. Galvin is the assigned Administrative Law Judge (ALJ) in this proceeding. ALJ Galvin was designated the presiding officer for this proceeding in the September 25, 2012 Assigned Commissioner's Scoping Memo and Ruling.

⁶⁷ CPUC 2d, 154 at 182-185.

9. Appeal and Review of Presiding Officer's Decision

The presiding officer's proposed decision was mailed to the parties, listed in Appendix C, in accordance with Section 311 and Rule 14.2 of the Commission's Rules of Practice and Procedure. Appeal and review of the presiding officer's decision was permitted pursuant to Rule 14.4 of the Commission's Rules of Practice and Procedure.

An appeal of the presiding officer's proposed decision was timely filed by respondents Nazar Najor, Daniel Najor, Ramsey Najor, Lauren Najor, Live Oak Springs Water Company, Live Oak Holding, LLC. and Live Oak Enterprises, LLC. Appeals were also filed by City National Bank and the Division of Water and Audits. Upon review and consideration of these appeals, clarifying language was added to Conclusions of Law 3 and 4 and Ordering Paragraphs 1 and 5. There were no substantive changes to the presiding officer's proposed decision.

Findings of Fact

1. Live Oak is a Class D water utility providing public utility water service.
2. The Krauths were authorized to acquire ownership of Live Oak Springs Water & Power Company as part of a larger transaction involving a motel, lodge, bar, restaurant, and a substantial portion of land in 1979.
3. Elia Najor acquired the public utility owned by the Krauths in 1982 without Commission authorization as part of a larger transaction involving a general store, restaurant, resort facilities and all other properties owned by the Krauths at Live Oak Springs.
4. Nazar Najor has managed Live Oak since 1984.

5. Elia Najor obtained Commission authorization to acquire Live Oak Springs Water & Power Company in 1992 and was required to separate public utility water operations under the name Live Oak Springs Water Company from the other businesses he acquired as part of the purchase.

6. Elia Najor's application to acquire Live Oak described the water system to include 20 acres of land.

7. D.92-09-001 required Live Oak to obtain the services of a licensed land surveyor to prepare and record in the San Diego County Recorder's Office a record of the survey delineating the boundaries [real property] of all water company operating property.

8. Live Oak has not undertaken a land survey of its public utility property.

9. D.08-09-008 authorized Live Oak Enterprises to acquire Live Oak in 2008.

10. California Secretary of State Statement of Information filings of Live Oak Enterprises identified a 2008 change in the ownership of its parent entity, Live Oak Holding.

11. Live Oak Holding's federal tax returns identified a change in the ownership of Live Oak Holding, doing business as Live Oak Enterprises in California occurred in 2008.

12. Nazar Najor testified in Superior Court of San Diego County in 2012 that Live Oak is owned by himself, and his two brothers, Daniel and Ramsey.

13. Live Oak's 2007 Annual Report to the Commission identified Live Oak Holding as doing business as Live Oak in 2007.

14. Live Oak Enterprises filed a fictitious business name statement with the County of San Diego on June 4, 2007.

15. Live Oak Enterprises published a fictitious business name statement in June and July of 2007 identifying its first day of doing business under the name of Live Oak as June 4, 2012.

16. Live Oak Enterprises registration to do business in San Diego County as Live Oak expired on June 4, 2012.

17. Nazar Najor and Ramsey Najor are identified as owners of Live Oak Management Corporation.

18. A January 30, 2006 preliminary title report references a lien for unsecured property taxes billed by the San Diego County tax collector in 2003 for Live Oak Management Corporation doing business as Live Oak Springs Water & Power Company.

19. Live Oak's 2005 Annual Report to the Commission identifies Nazar Najor and Ramsey Najor as owners of Live Oak.

20. Live Oak Management Corporation was suspended by the California State Franchise Tax Board in 2007, the suspension which remains in effect.

21. All the assets of Live Oak Springs Management Corporation were transferred to Live Oak Holding in 2007.

22. An acceptance letter, filed on February 10, 1993, identified Elia Najor, Ramsey Najor and Nazar Najor as equal partners in Live Oak.

23. A December 13, 1991 Live Oak fictitious business name statement with the San Diego County Recorder identified Elia Najor and Nazar Najor doing business as Live Oak.

24. Various real property parcels were transferred between the Krauths and Live Oak between April 2, 1979 and November 19, 1979.

25. The Krauths transferred title for Real Property APN 606-050-03 back to Live Oak on November 19, 1979.
26. Twenty acres of land was identified as part of Live Oak in an October 23, 1990 filing of A.90-10-058.
27. Live Oak transferred title for APN 606-050-03 to Live Oak Management Corporation on May 22, 1991.
28. Decision 92-09-001 identified a two-acre parcel of land, APN 609-050-03-00 as being part of Live Oak.
29. A January 6, 2006 property appraisal identified property purchased in 1984, including APN 609-050-03-00, to be vested with Live Oak Management Corporation.
30. Live Oak's blanket easement only provides an easement for installing a water distribution system and electrical transmission system in, upon or over all streets, road or highways.
31. Live Oak has a history of non-compliance with DEH environmental health permitting and water quality requirements.
32. Live Oak has and continues to provide public utility water service without a required environmental health permit.
33. Live Oak submitted a falsified lab report to DEH in 2007.
34. Live Oak Holding entered into a Business Loan Agreement for \$1.5 million with 1st Pacific on July 5, 2006.
35. Live Oak Holding executed a Deed of trust to 1st Pacific on July 5, 2006, for property commonly known as 37820 Old Highway 80, Boulevard, California as security for the Loan, same address as Live Oak.

36. The Deed of Trust identifies 22 APNs, five of which are identical to the APNs identified by Live Oak as having public utility water property and one of which is identical to the APN identified in D.92-09-001 as being part of the Live Oak water system.

37. Four guarantors are identified in the 1st Pacific Business Loan Agreement: Daniel B. Najor, Nazar E. Najor, Ramsey Najor, and Live Oak Management Corporation.

38. Live Oak Management Corporation's guarantee was signed by Nazar Najor and Ramsey Najor.

39. Live Oak Management Corporation also granted real property with the same 22 APNs referenced in the Deed of Trust to Live Oak Holding.

40. 1st Pacific was closed by the California Department of Financial Institutions on May 7, 2010, and the FDIC was named receiver.

41. CNB acquired certain Live Oak Holding's loan to 1st Pacific from the FDIC on the same date that the FDIC was named receiver.

42. Live Oak Holding defaulted on the loan on February 17, 2011.

43. CNB served and recorded a Notice of Default and Election to Sell under Deed of Trust, including the 22 parcels of land.

44. As of October 5, 2012, the amount of unpaid principal and interest owed to City National Bank is \$1,889,256.28.⁶⁸ Fees, expenses, and interest continue to accrue.

45. The Nevada Secretary of State has no record of a Live Oak Enterprises limited liability entity.

⁶⁸ Joint Stipulation at 8.

46. The collateralization of the Loan included 22 APNs, some of which included real property known to have been previously owned by Live Oak and real property used for public utility purposes that were comingled with other business interests without Commission authorization.

Conclusions of Law

1. A receiver should be appointed to protect the health and safety of Live Oak customers due to Live Oak's unresponsiveness to Commission rules and order, inability to timely comply with DEH requirements, and falsification of lab reports.

2. An appointed receiver should expeditiously obtain the services of a licensed land surveyor to prepare and record in the San Diego Recorder's Office a record of survey delineating Live Oak's real property including public utility real property comingled with non-related business interests.

3. The collateralization of real property by Live Oak Holding involving public utility property prior to September 4, 2008 is null and void pursuant to Sections 825 and 851.

4. The appropriate remedy in this instance is to obtain a new owner of Live Oak.

5. Official notice should be taken of the San Diego County's Assessor/Recorder/County Clerk web site www.sdarcc.com identifying fictitious names, and showing that Live Oak Enterprises registration to do business in San Diego County as Live Oak expired on June 4, 2012 and has not been renewed.

6. Official notice should be taken of the Nevada Secretary of State web site at www.nvsos.gov/sosentitysearch which has no record of a Live Oak Enterprises limited liability entity.

O R D E R

IT IS ORDERED that:

1. The Commission takes official notice of the San Diego County's Assessor/Recorder/County Clerk web site www.sdarcc.com identifying fictitious names, and showing that Live Oak Enterprises registration to do business in San Diego County as Live Oak Springs Water Company expired on June 4, 2012 and has not been renewed.
2. The Commission takes official notice of the Nevada Secretary of State web site at www.nvsos.gov/sosentitysearch, which has no record of a Live Oak Enterprises limited liability entity.
3. The Commission's Legal Division shall file immediately with the Superior Court of San Diego County a petition for appointment of a receiver to assume possession of and operation of the water system of Live Oak Springs Water Company.
4. A receiver appointed by the Superior Court of San Diego shall expeditiously obtain the services of a licensed land surveyor to prepare and record in the San Diego County Recorder's Office a record of survey delineating Live Oak Springs Water Company (Live Oak) water utility real property, including public utility real property comingled with the non-public utility business interests of the prior owners of Live Oak and subsequently transferred to various non-public utility entities, that took place without Commission authorization.

5. The July 5, 2006 Loan instrument between Live Oak Holding, LLC and 1st Pacific Bank of California (predecessor of City National Bank) is void solely with regard to property necessary for the operation of Live Oak Springs Water Company (Live Oak) to be determined by a receiver appointed by the Superior Court of San Diego and identified in a survey to be completed by a licensed land surveyor. Under no circumstances may City National Bank seek repayment of the loan from future revenue derived from Live Oak's ratepayers.

6. Investigation 12-08-004 is closed.

This order is effective immediately.

Dated July 25, 2013, at San Francisco, California.

MICHAEL R. PEEVEY

President

MICHEL PETER FLORIO

CATHERINE J.K. SANDOVAL

MARK J. FERRON

CARLA J. PETERMAN

Commissioners

APPENDIX A
NAMED RESPONDENTS
AS MODIFIED BY DECISION 13-03-010

ENTITY RESPONDENTS

City National Bank

Live Oak Enterprises, LLC

Live Oak Holding, LLC

Live Oak Management Company

Live Oak Springs Water Company

INDIVIDUAL RESPONDENTS

Nazar E. Najor

Daniel B. Najor

Ramsey Najor

Lauren Najor

(END OF APPENDIX A)

APPENDIX B
CURRENT OWNERSHIP CHART OF
LIVE OAK SPRINGS WATER COMPANY



(END OF APPENDIX B)

APPENDIX C
******* SERVICE LIST *******
Last Updated on 14-MAY-2013 by: JVG
I1208004 LIST

******* PARTIES *******

Lauren P. Najor
0/0 LIVE OAK SPRINGS WATER COMPANY
PO BOX 1241
BOULEVARD CA 91905
For: Lauren P. Najor

Steven R. Bechen
CITY NATIONAL BANK
8889 RIO SAN DIEGO DRIVE, STE. 101
SAN DIEGO CA 92108
For: City National Bank

Jonathan P. Knapp
Legal Division
RM. 5129
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-5377
jp8@cpuc.ca.gov
For: Division of Water & Audits

Nazar E. Najor
LIVE OAK SPRINGS WATER & POWER CO.
PO BOX 1241
BOULEVARD CA 91905
(619) 766-4288
Nazar@LiveOakSprings.com
For: Live Oak Springs Water Company

LIVE OAK SPRINGS WATER COMPANY
PO BOX 1241
BOULEVARD CA 91905
For: Live Oak Management Company & Live Oaks Enterprises,
LLC.

Daniel B. Najor
LIVE OAK SPRINGS WATER COMPANY
PO BOX 1241
BOULEVARD CA 91905
For: Daniel Najor

Ramsey Najor
LIVE OAK SPRINGS WATER COMPANY
PO BOX 1241
BOULEVARD CA 91905

Matthew Semmer
Receiver
NOVASCEND ASSET SOLUTIONS
5755 OBERLIN DRIVE, SUITE 301
SAN DIEGO CA 92121
MSemmer@Novascend.com
For: Receiver for City National Bank. (Receiver appointed by
Superior Court of California, County of San Diego)

Scott Alan Miller
SELTZER CAPLAN MCMAHON VITEK
750 B STREET, SUITE 2100
SAN DIEGO CA 92101
Miller@scmv.com
For: City National Bank

******* STATE EMPLOYEE *******

Michael J. Galvin
Administrative Law Judge Division
RM. 2003
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-1483
mfg@cpuc.ca.gov

Ramon Go
Division of Water and Audits
AREA 3-B
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-1350
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Kayode Kajopaiye
Division of Water and Audits
RM. 3105
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-2279
kok@cpuc.ca.gov

******* INFORMATION ONLY *******

CALIFORNIA ENERGY MARKETS
425 DIVISIDERO ST., STE. 303
SAN FRANCISCO CA 94117-2242
(415) 963-4439 X-14
cem@newsdata.com

APPENDIX C
******* SERVICE LIST *******
Last Updated on 14-MAY-2013 by: JVG
I1208004 LIST

For: Ramsey Najor

Donald C. Liddell
Attorney
DOUGLASS & LIDDELL
2928 2ND AVENUE
SAN DIEGO CA 92103
(619) 993-9096
liddell@energyattorney.com

(END OF APPENDIX C)

EXHIBIT
10



March 28, 2013

Nazar Najor
Live Oak Springs
37820 Old Highway 80
P.O. Box 1241
Boulevard, CA 91905

Notice of Violation

Live Oak Springs has violated the California Public Utilities Commission's (CPUC) Rules and Regulations per Resolution (Res.) W-4799 dated October 2009 by selling trucked water without permission to Straub Construction in the year 2011 for use at a Department of the Army site.

These were violations of General Order (GO) 103-A Section II § B (1) in that the water supplied was not from a permitted source. Mr. Najor stated that 3,424,627 + 2,424,627 gallons of water were trucked from Live Oak Springs. Evidence of trucking during a typical week in 2001 indicates that an average of 45,750 gallons per day were taken from the utility in 3,000 gallon capacity trucks. This amounts to 135 days of violations.

Res. W-4799 allows CPUC Division of Water and Audits (DWA) to impose a fine of \$500 per violation. This amounts to a fine of $135 \times \$500 = \$67,500$.

The evidence that Live Oak Springs had been selling this trucked water was provided by Nazar Najor on November 21, 2012 in answer to a data request by Kayode Kajopaiye for CPUC Investigation I.12-08-004. Mr. Najor has admitted that he had not obtained written approval from the CPUC to truck water, but instead acted on verbal approval which is untrue, unallowable and unverified.

Res. W-4799 allows DWA to provide prior written notice to cure or informally contest a violation and proposed penalty amount before a citation is issued. Since this was past activity there is no period for which the company can come into compliance.

Service of this Notice of Violation is by first-class mail. An appeal may be brought by serving a Notice of Appeal upon Staff, who is Albert Schiff, and the Respondent shall indicate the grounds for the appeal in the notice. Details of the appeal process are contained in Res. W-4799 which has already been provided to Mr. Najor.

A handwritten signature in blue ink that reads "Albert Schiff".

Albert Schiff
Division of Water and Audits

EXHIBIT

11



East County Substation Project
CONSTRUCTION WATER USE REPORT
 January 1, 2014 – January 31, 2014

This report is being provided in compliance with the San Diego Gas & Electric Company (SDG&E) East County (ECO) Substation Project (Project) Amended Construction Water Supply Plan (Amended CWSP) revised September 30, 2013 and provides a summary of total construction water consumption for the period January 1, 2014 through January 31, 2014. Below is a table identifying each of the Project’s approved water sources and the amount of water consumed for construction from each source.

A report from SDG&E’s construction contractor, Beta Engineering, documenting the amount of water used is included as Attachment A: Beta Monthly Water Usage Report. As shown in the table below, no water was used from the approved source at Live Oak Springs or Campo Indian Reservation during this reporting period.

Construction Water Use Summary

Water Source	Time Period Start	Time Period End	Period Usage (Gal)	Current to Date Usage (Gal)
JCSD	1/1/2014	1/31/2014	454,815	10,474,626
Live Oak Springs	1/1/2014	1/31/2014	0	858,570
City of San Diego	1/1/2014	1/31/2014	2,060,883	37,063,880
Campo Indian Reservation	1/1/2014	1/31/2014	0	12,181,187
TOTAL			2,515,698	60,578,263

Monitoring Plan Discussion

As previously communicated to the California Public Utilities Commission on December 3, 2013, Campo Indian Reservation (Campo) stopped providing construction water deliveries to the Project on November 18, 2013; therefore, SDG&E will not be providing data associated with the production or monitoring wells located at Campo until water deliveries to the Project resume.

ATTACHMENT A: BETA MONTHLY WATER USAGE REPORT



Monthly Water Usage Report

East County Substation Project



January

Prepared by: Ross Sims

Submitted: February 5, 2014

ECSP Water Usage

The East County Substation Project is loading water from various sites in San Diego County. The following summarizes the water usage from each site for the month of November. At the end is a total project summary of water usage.

Below indicates the active and inactive sites for the month of January.

Project Water Loading Sites:

- Jacumba Community Services District – ACTIVE
- Princess View (City of San Diego) – ACTIVE
- Campo – INACTIVE
- Live Oak Springs – INACTIVE
- Federal Blvd. (City of San Diego) – INACTIVE
- Navajo Road (City of San Diego) – INACTIVE

Water Loading Site Usage

Princess View - January		
Meter: 32645 - 2" Meter		
Date	Meter Reading (ft ³)	Notes
1/1/2014	1,860,620	Beginning of month reading
1/31/2014	1,860,620	End of month reading
Total	0	
TOTAL (GAL.)	0	Converted to gallons
Meter: 11963864 - 6" Meter		
Date	Meter Reading (ft ³)	Notes
1/1/2014	2,024,500	Beginning of month reading
1/31/2014	2,300,000	End of month reading
Total	275,500	
TOTAL (GAL.)	2,060,883	Converted to gallons

Jacumba Community Services District - January

Meter: T3000

Date	Meter Reading (ft³)	Notes
1/1/2014	1,518,300	Beginning of month reading
2/1/2014	1,579,100	Beginning of Day reading
Total	60,800	
	454,815	Total converted to gallons
Non- Project Use (Gal.)	0	
TOTAL (GAL.)	454,815	Converted to gallons

ECSP Water Usage Summary

	City of San Diego	JCSD	Campo	Live Oak Springs
	Gallons	Gallons	Gallons	Gallons
March	0	549,210	0	243,575
April	0	0	0	0
May	0	893,112	0	0
June	5,229,332	1,594,099	0	0
July	13,565,272	1,946,360	433,802	0
August	11,686,951	2,343,718	3,796,485	0
September	2,328,619	1,466,509	3,017,200	0
October	1,075,234	350,836	3,350,500	614,995
November	6,732	487,729	1,583,200	0
December	1,110,857	388,238	0	0
January	2,060,883	454,815	0	0
Total	37,063,880	10,474,626	12,181,187	858,570
Project Total (Gallons):			60,578,263	

EXHIBIT
12

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



October 1, 2013

Mr. Don Houston
Project Manager II, Environmental Services
San Diego Gas and Electric
1010 Tavern Road
Alpine CA, 91901

Subject: *Minor Project Refinement Request (MPRR) #8 – Construction Water Use – East County Substation Project (Application No. 09-08-008)*

Dear Mr. Houston:

On October 1, 2013, San Diego Gas & Electric (SDG&E) submitted a Minor Project Refinement Request (MPRR) to the California Public Utilities Commission (CPUC) to increase the total construction water usage to 90 million gallons. The CPUC approved an Amended Construction Water Supply Plan (July 3, 2013) that included a maximum of 50 million gallons for water use. The increase in water usage identified in MPRR #8 will be provided through water supplied by the City of San Diego.

The CPUC voted on June 21, 2012 to approve the East County (ECO) Substation Project (Decision 12-06-039) and a Notice of Determination was submitted to the State Clearinghouse (SCH#2009121079). The Commission decision approving the Permit to Construct (PTC) authorizes Energy Division staff to approve requests by SDG&E for minor project refinements. The decision states that minor project refinements may be approved so long as such minor project refinements are located within the geographic boundary of the study area of the EIR/EIS and do not, without mitigation, result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the environmental document; conflict with any mitigation measure or applicable law or policy; or trigger an additional permit requirement.

This letter documents the CPUC's thorough evaluation of the increased water usage identified in MPRR #8 and that the changes requested in MPRR #8 are allowed pursuant to the Commission decision issuing the PTC. In accordance with the MMCRP, the MPRR was reviewed by CPUC to confirm that no new impacts or increase in impact severity would result from the requested activities.

Sincerely,

/s/ Amy Baker

Amy Baker
CPUC Environmental Project Manager

EXHIBIT
13

Campo-Cottonwood Sole Source Aquifer Designated Area

CALIFORNIA



Campo-Cottonwood
Sole Source Aquifer







Notes and Explanation:

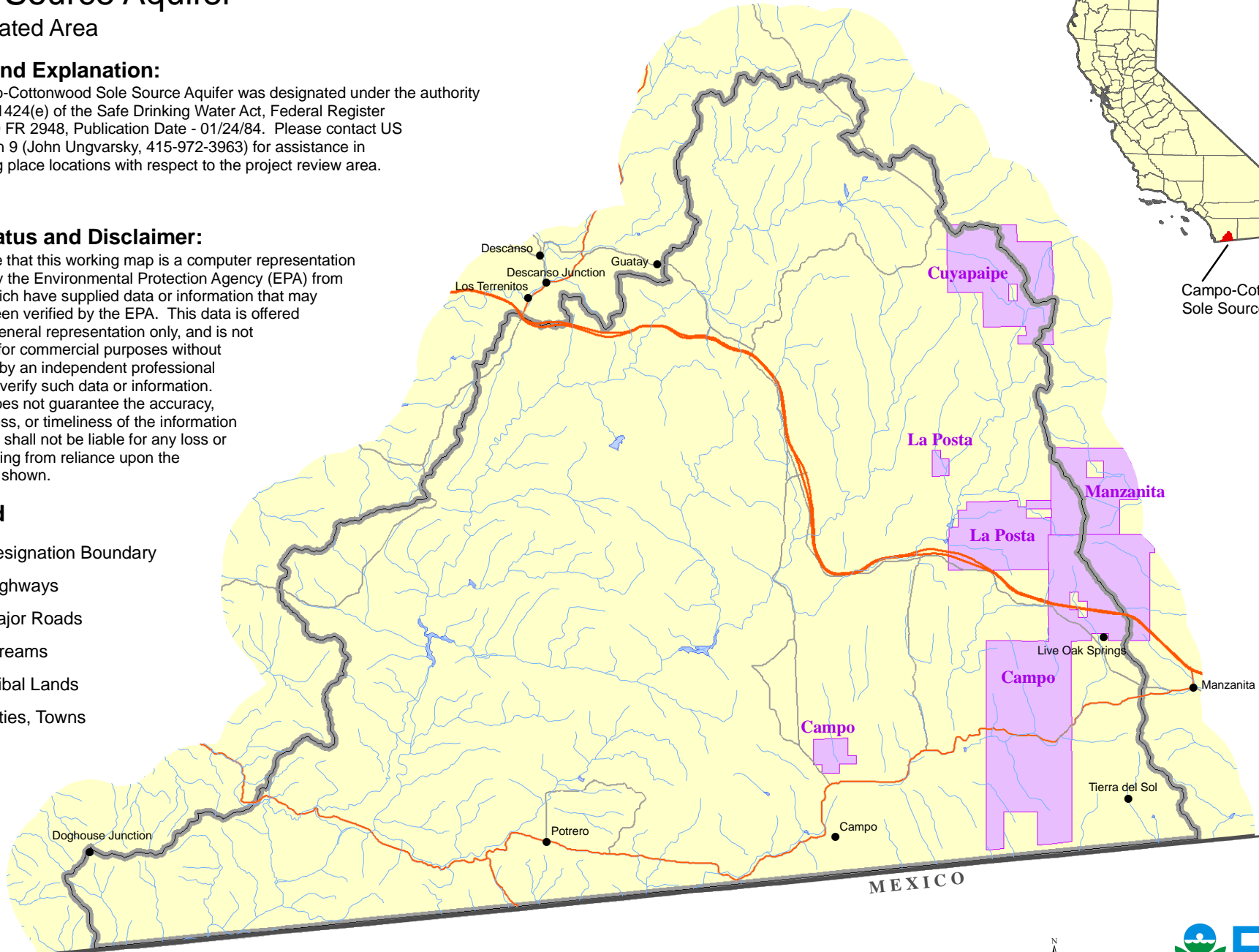
The Campo-Cottonwood Sole Source Aquifer was designated under the authority of Section 1424(e) of the Safe Drinking Water Act, Federal Register Citation-49 FR 2948, Publication Date - 01/24/84. Please contact US EPA Region 9 (John Ungvarsky, 415-972-3963) for assistance in determining place locations with respect to the project review area.

Map Status and Disclaimer:

Please note that this working map is a computer representation compiled by the Environmental Protection Agency (EPA) from sources which have supplied data or information that may not have been verified by the EPA. This data is offered here as a general representation only, and is not to be used for commercial purposes without verification by an independent professional qualified to verify such data or information. The EPA does not guarantee the accuracy, completeness, or timeliness of the information shown, and shall not be liable for any loss or injury resulting from reliance upon the information shown.

Legend

-  Designation Boundary
-  Highways
-  Major Roads
-  Streams
-  Tribal Lands
-  Cities, Towns





WTR0801656.4 Oct. 2008

EXHIBIT

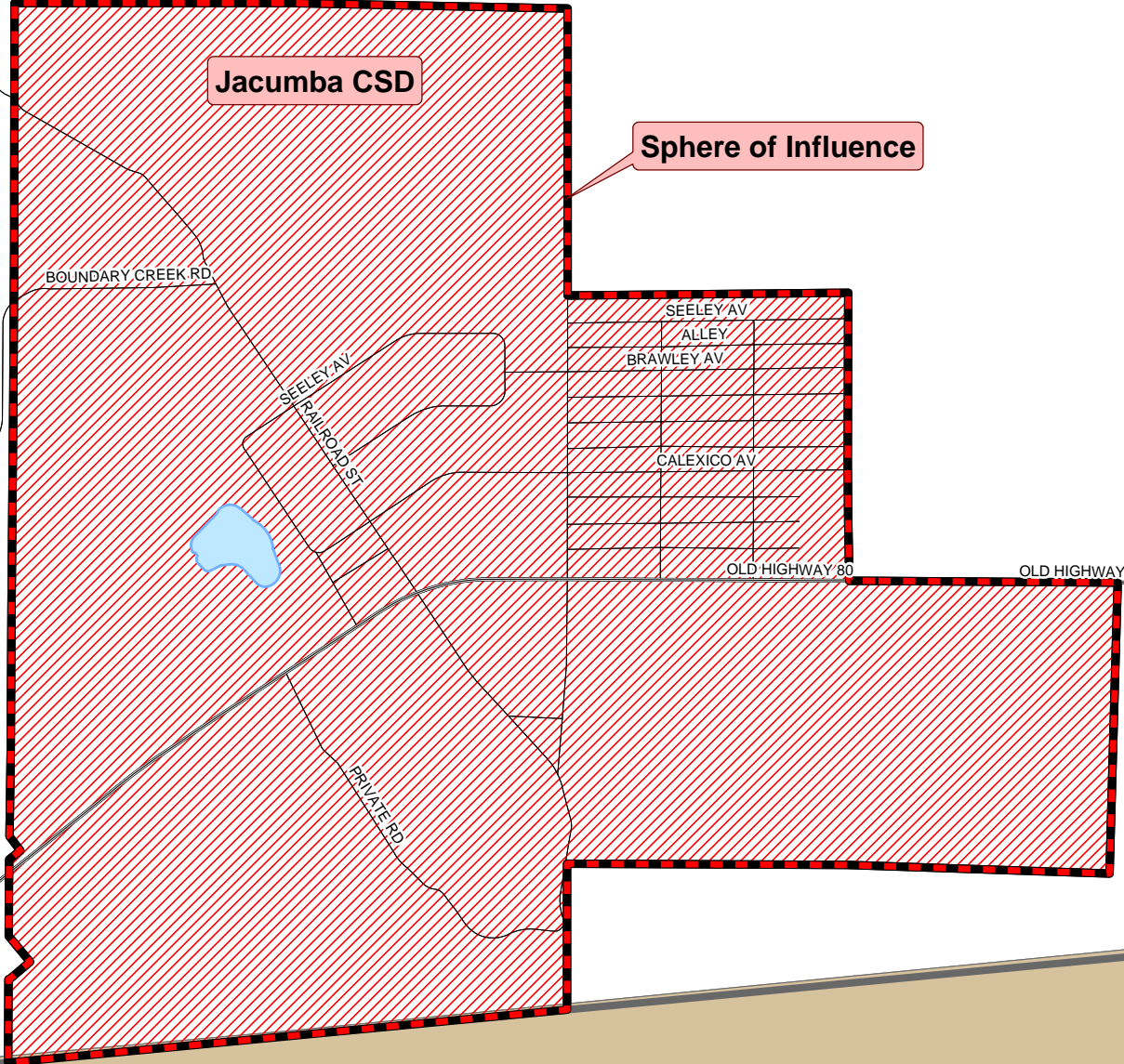
14

Jacumba CSD

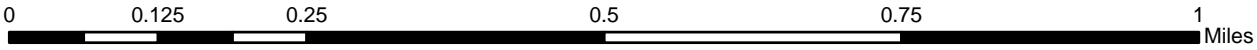
LEGEND

-  Jacumba CSD
-  Sphere of Influence (SOI)

SOI Adopted: 10 / 7 / 85
SOI Affirmed: 8 / 6 / 07



Baja California, Mexico



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This map has been prepared for descriptive purposes only and is considered accurate according to the GIS and LAFCO data.
 File: G:/GIS/PROJECTS/Maps11x17/Cities/CSD_Jacumba.mxd
 Printed July 2008.

EXHIBIT
15

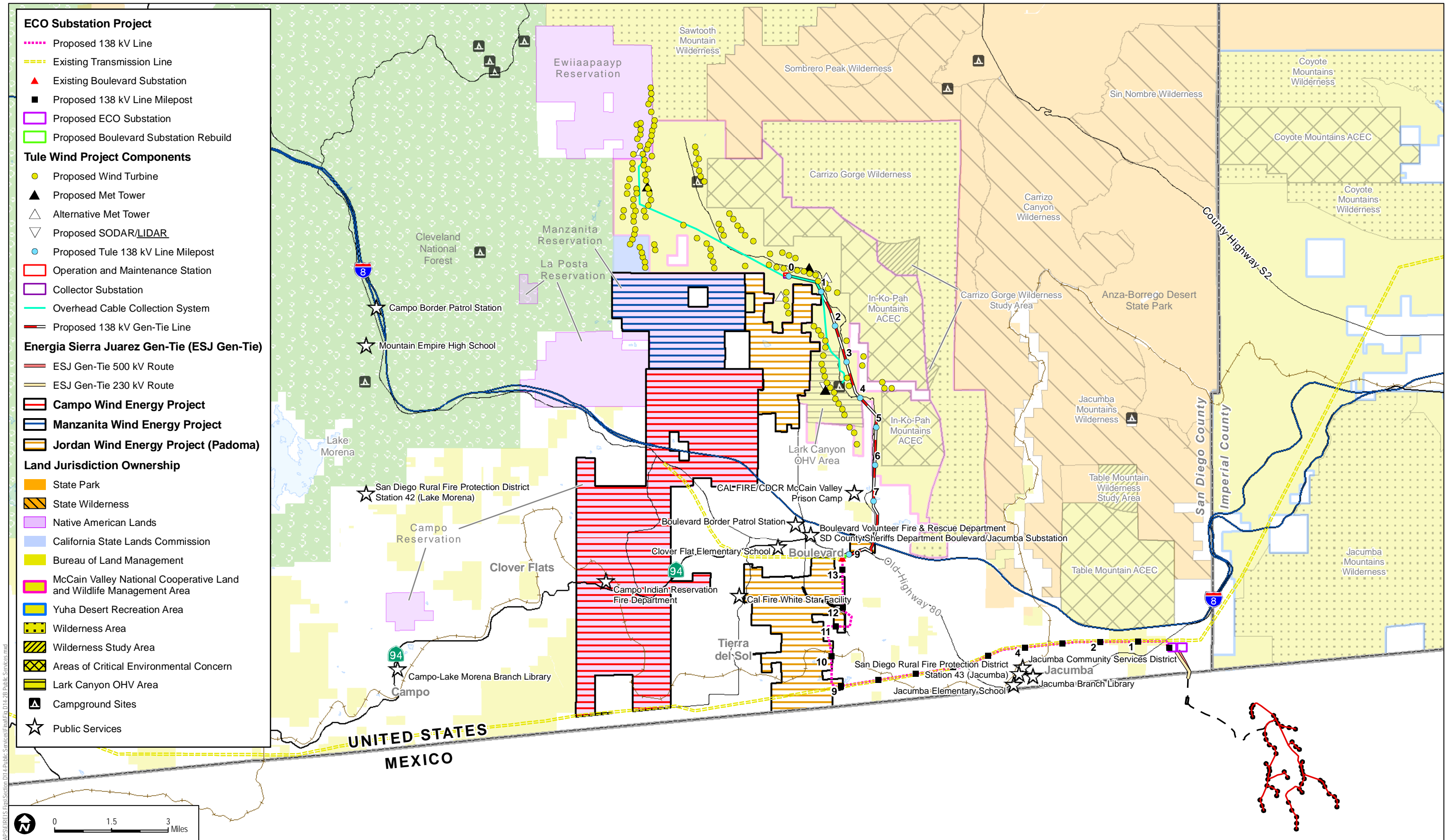


EXHIBIT
16



Memorandum

TO: Patrick Brown, Project Planner
FROM: Jim Bennett, Groundwater Geologist
SUBJECT: Groundwater Supply Options; Project Number P09-008
DATE: March 4, 2010

GROUNDWATER RESOURCES

Jim Bennett, County Groundwater Geologist, has reviewed the most recent information submitted from the applicant in regard to where the applicant plans to obtain the approximately 780,000 gallons (2.4 acre-feet) of water necessary for the six-month construction phase of this project. The applicant has indicated that they are exploring purchasing groundwater offsite from a well (known as JCSD Well #6) owned by the Jacumba Community Services District (JCSD).

Purchasing water from water districts or private individual well owners outside of the County Water Authority (CWA) would be considered a “groundwater extraction operation” as defined within the County Zoning Ordinance (Definition G., Section 1810, 6552, and 6654) and would require obtaining a Major Use Permit (MUP) from the County for the operation. The JCSD would be responsible for obtaining the MUP since they are the owner of the property containing the well in which groundwater would be extracted for sale.

If groundwater is proposed from an on-site well rather than obtaining groundwater from the JCSD, there would be no groundwater investigation requirements. The basin is located in a completely undeveloped region of the County. Therefore, the pumping of approximately 2.4 acre-feet of water needed for the project in a basin with no other known groundwater users would have a less than significant impact on groundwater resources.

CEQA Analysis of the Groundwater Extraction Operation

The following analysis is provided to evaluate the impacts to groundwater resources from obtaining water for the project from the JCSD. It is understood that water would be supplied to the project from JCSD Well #6. This well is a non-potable well due to elevated sulfide and fluoride concentrations in the water. Approximately 2,500 gallons of water a day would be supplied, six days a week, for approximately six months. This would amount to approximately 780,000 gallons of water (2.4 acre-feet).

Applicable Groundwater Regulations

The County Guidelines for Determining Significance – Groundwater Resources contain a series of thresholds for determining significance for both water quantity and water quality. Since the water proposed for this project is not for potable use, the water quality threshold is not applicable. To evaluate cumulative impacts to groundwater resources, a water balance analysis is typically required. However, due to the limited amount of groundwater proposed and the temporary use, a water balance analysis is not required. To evaluate off-site well interference as a result of this project, the following guideline for determining significance shall be used:

As an initial screening tool, offsite well interference will be considered a significant impact if after a five year projection of drawdown, the results indicate a decrease in water level of 20 feet or more in the offsite wells. If site-specific data indicates water bearing fractures exist which substantiate an interval of more than 400 feet between the static water level in each offsite well and the deepest major water bearing fractured in the well(s), a decrease in saturated thickness of 5% or more in the offsite well would be considered a significant impact.

Summary of Aquifer Test from JCSD #6

The project intends to receive its groundwater from the JCSD Well #6, located on the western edge of the town of Jacumba. JCSD Well #6 was drilled in April 2003 to a depth of 465 feet below ground surface (bgs). The well was cased to a depth of 113 feet bgs. The well is screened from 113 feet to 465 feet bgs entirely within fractured bedrock.

A 24 hour step-drawdown test was conducted by Fain Drilling on April 24, 2003 to obtain an approximate production rate for the well. Drawdown and recovery plots are provided as attached Figures 1 and 2 to this document. The well was pumped at 200 gallons per minute (gpm), and stepped up to 300, 400, and then 600 gallons per minute after six hours of pumping. At 12 hours, the water level reached 92 feet bgs and remained at that level until the end of the 24 hour well test. The water level after 5.6 hours of recovery fully recovered to 3 feet bgs. A total of approximately 759,000 gallons of water was pumped from the well in 24 hours. It is likely the entire 780,000 gallons of water the project needs could be produced from this well in 24 hours.

Calculation of Offsite Drawdown

The nearest offsite well is JCSD Well#4, located 60 feet the southeast of JCSD Well#6. Therefore, impacts would be considered significant, if drawdown in this well was 20 feet after five years of pumping. This project is anticipated to produce approximately 780,000 gallons of water in six months, and the following calculations provide drawdown anticipated to occur in JCSD Well#4 in this six month period.

Aquifer transmissivity was first estimated using the Cooper-Jacobs approximation to the Theis equation as follows:

$$T = \frac{2.3 \times Q}{4 \times \pi \times \Delta s}$$

Where:

$T =$	745	Transmissivity (feet ² /day)
$Q =$	101,711	average pumping rate of 529 gpm (feet ³ /day [multiply gpm by 193])
$\pi =$	3.14	pi
$\Delta s =$	25	the change in residual drawdown over 1 logarithm of time (ft)

Reference: Cooper, H.H., Jr. and C.E. Jacobs. 1946. A Generalized Graphical Method for Evaluating Formation Constraints and Summarizing Well Field History. Transactions, American Geophysical Union 27:526-34.

Predicted drawdown to occur in JCSD Well#4 after six months of pumping JCSD Well#6 at a rate of 1.5 gpm required to produce 780,000 gallons over six months was calculated using the Cooper Jacob Modified Theis Non-Equilibrium Equation as follows:

$$s = \frac{0.183 Q}{T} \times \frac{\log 2.25Tt}{r^2 S}$$

Where:

$s =$	0.3	Predicted drawdown at JCSD Well#4 (feet)
$Q =$	288.75	cubic feet per day (multiply gpm * 192.5 to convert)
$T =$	745	feet squared per day
$t =$	182.5	time (days)
$r =$	60	distance from pumping well (feet)
$S =$	0.001	Storativity (dimensionless)

Reference: Cooper, H.H., Jr. and C.E. Jacobs. 1946. A Generalized Graphical Method for Evaluating Formation Constraints and Summarizing Well Field History. Transactions, American Geophysical Union 27:526-34.

Drawdown in JCSD Well#4 is predicted to be 0.3 feet after six months of pumping required for the project. This would be considered to be a less than significant impact based on the well interference threshold.

Cumulative Groundwater Impacts

The County has historical water level records (June 1990 to July 2007) from JCSD Well #4, located approximately 60 feet to the southeast of JCSD Well #6 (see Figure 3). According to Tom Lindemeyer of the JCSD, this well is screened in the shallow alluvial aquifer overlying the bedrock aquifer to a depth of about 60 feet bgs. The water levels have varied from 1.8 feet bgs in 1996 to 22.5 feet bgs in 2005. The water level declines noted between 1998 and 2005 from an extended drought period recovered from the well above-average rainfall of 2004-2005. The most recent water level collected in July 2007 indicated water levels at 7.7 feet bgs. This well continues to be an active production well for the potable needs of the JCSD. Cumulative impacts are considered less than significant since water levels do not show any indications of an overdraft

condition, and the amount of additional drawdown from groundwater pumping for this project would have a less than significant effect on the surrounding offsite wells.

Please contact Jim Bennett, County Groundwater Geologist, at 858-694-3820 if you have any questions regarding these comments.

Figure 1
JCSD#6: Drawdown

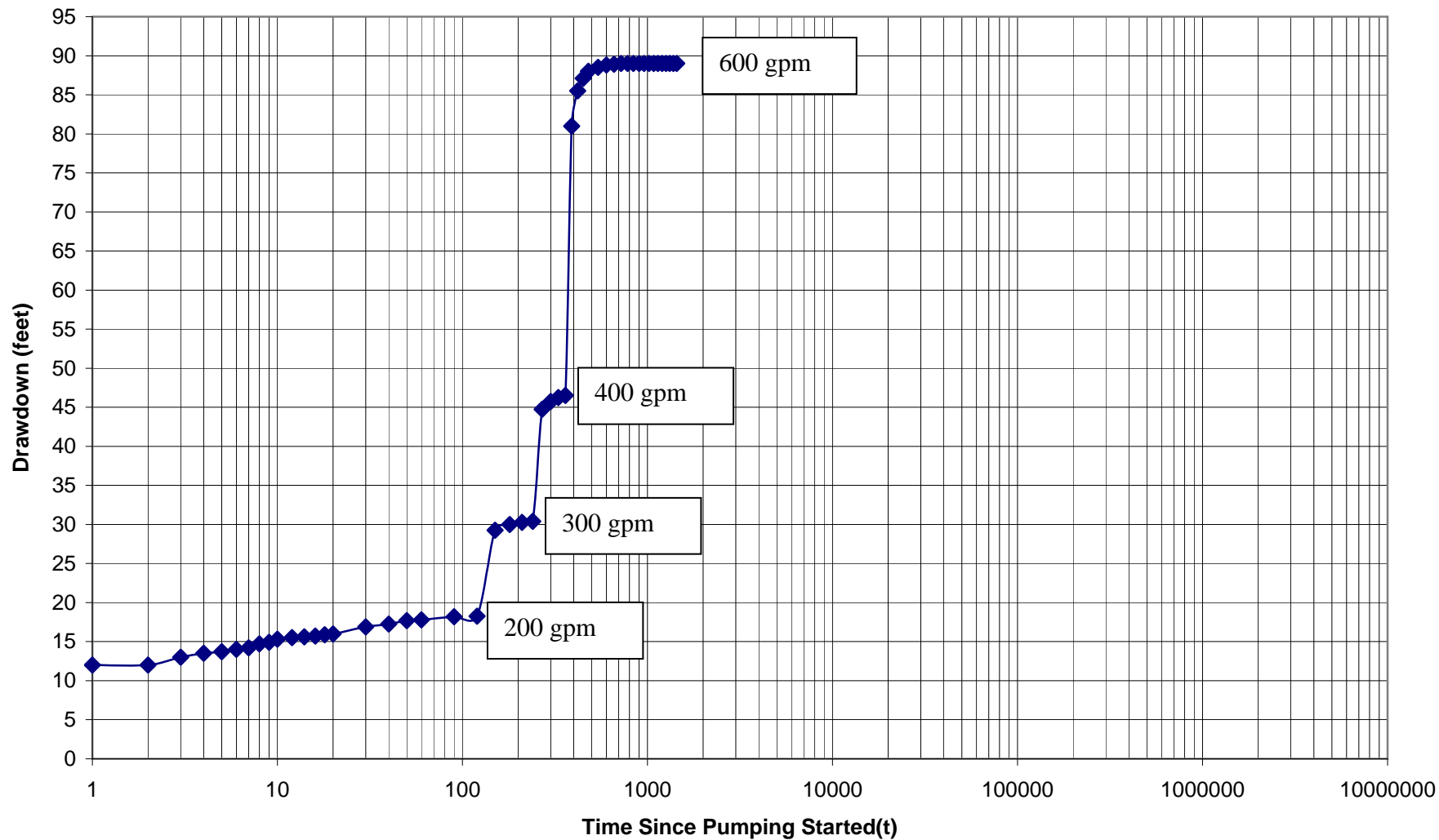


Figure 2
JCSD#6: Recovery

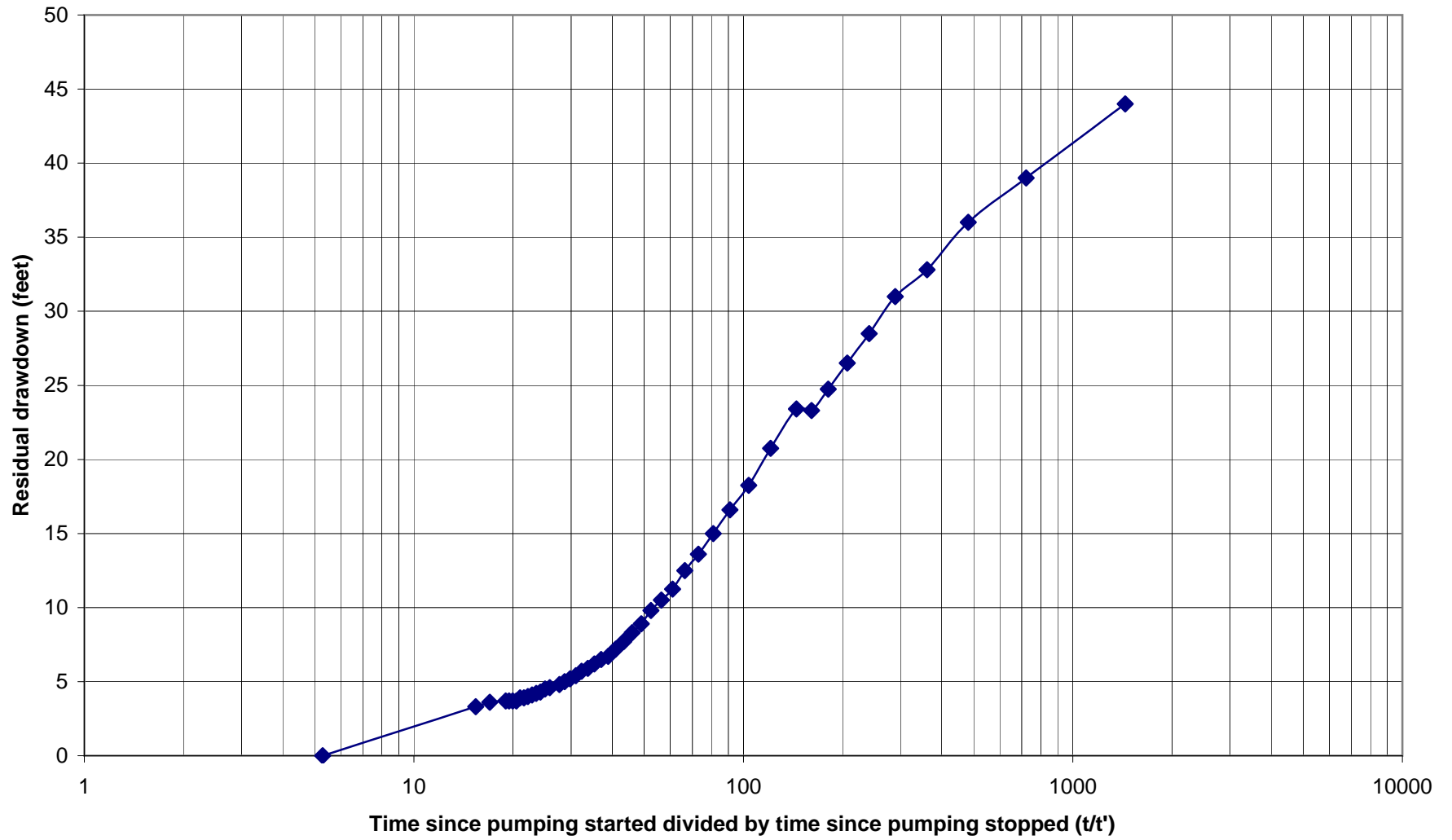
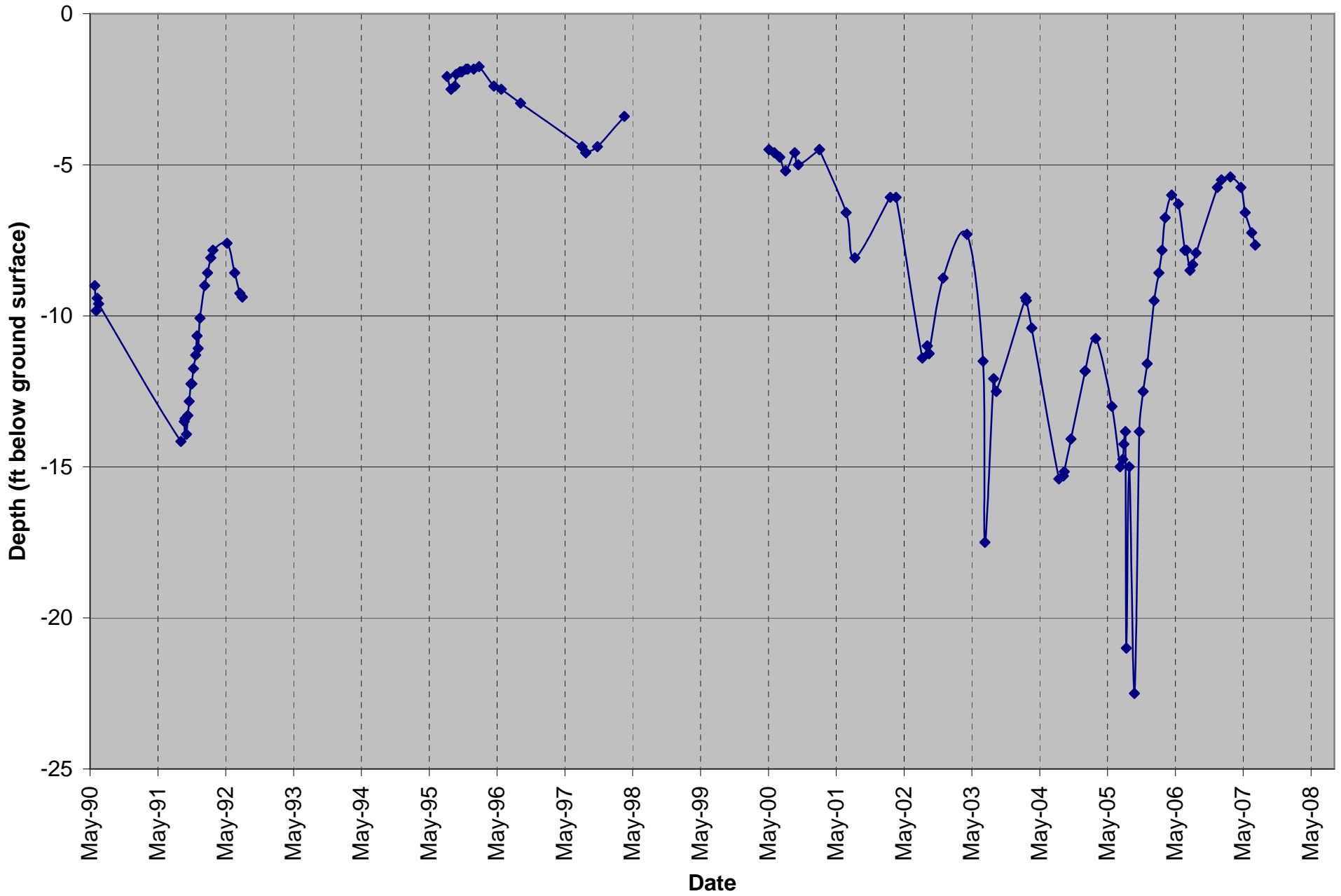


Figure 3
JCSD Well #4 Hydrograph



EXHIBIT

17

Good afternoon,

Please find attached the application for Tule Wind, LLC to purchase water from the Jacumba Community Service District. As I mentioned over the phone last week, we are looking for a water source to use during construction of our wind farm, located in McCain Valley, near the town of Boulevard. Construction is expected to start sometime in the late fall of 2014. Please let me know if you need any other information from me in order to place this item on the Board's agenda on December 19th.

Thank you and best wishes,

Harley

December 23, 2013
Iberdrola Renewables, LLC
Business Development
211 Chapalita Drive
Encinitas, CA92024
Attn. K. Harley McDonald
Lead/Senior Business Developer
Subject: **Tule Wind Project**
Construction Water

Dear Harley,

Jacumba Community Service District has been contacted by Iberdrola Renewables regarding construction of the Tule Wind project located near Jacumba, California scheduled to begin in the near future. The project will require construction water for grading and dust control activities. .

Jacumba Community Service District understands that Iberdrola Renewables is exploring the feasibility of several sources of construction water for the project. It is possible that a significant portion of the construction water needs will be met by obtaining commitments from these other sources. -

At the request of Iberdrola Renewables, Jacumba Community Service District hereby confirms that up to 40,000 gallons per day of non potable water, dependent on the water table will be available for project use from the Jacumba Community Service District during the Tule Wind Project as long as previous contracted projects do not overlap.

Sincerely,

Jacumba Community Service District

Debby Troutt
General Manager

EXHIBIT
18



COUNTY OF SAN DIEGO
DEPARTMENT OF PLANNING AND LAND USE: Zoning
PROJECT FACILITY AVAILABILITY FORM, Water

Please type or use pen

Soitec Solar Developmet LLC. 619-733-2649
 Owner's Name Phone
 16550 Via Esprillo
 Owner's Mailing Address Street
 San Diego CA 92127
 City State Zip

ORG _____
 ACCT _____
 ACT _____
 TASK _____
 DATE _____ AMT \$ _____

W

DISTRICT CASHIER'S USE ONLY

SECTION 1. PROJECT DESCRIPTION

TO BE COMPLETED BY APPLICANT

- A. Major Subdivision (TM) Specific Plan or Specific Plan Amendment
 Minor Subdivision (TPM) Certificate of Compliance:
 Boundary Adjustment
 Rezone (Reclassification) from _____ to _____ zone.
 Major Use Permit (MUP), purpose: Solar Farms
 Time Extension...Case No. _____
 Expired Map...Case No. _____
 Other _____

Assessor's Parcel Number(s)
 (Add extra if necessary)

See Attached	

- B. Residential Total number of dwelling units _____
 Commercial Gross floor area _____
 Industrial Gross floor area _____
 Other Gross floor area None

Thomas Bros. Page _____ Grid _____
 McCain Valley Road
 Project address Street
 Boulevard
 Community Planning Area/Subregion Zip

- C. Total Project acreage 765 Total number of lots NA
 D. Is the project proposing the use of groundwater? Yes No
 Is the project proposing the use of reclaimed water? Yes No

Owner/Applicant agrees to pay all necessary construction costs, dedicate all district required easements to extend service to the project and COMPLETE ALL CONDITIONS REQUIRED BY THE DISTRICT.

Applicant's Signature: [Signature] Date: 12-3-12
 Address: 16550 Via Esprillo San Diego, CA 92127 Phone: 619-733-2649

(On completion of above, present to the district that provides water protection to complete Section 2 below.)

SECTION 2: FACILITY AVAILABILITY

TO BE COMPLETED BY DISTRICT

District Name: Jacumba Community Facilities District Service area _____

- A. Project is in the district.
 Project is not in the district but is within its Sphere of Influence boundary, owner must apply for annexation.
 Project is not in the district and is not within its Sphere of Influence boundary.
 The project is not located entirely within the district and a potential boundary issue exists with the _____ District.
- B. Facilities to serve the project ARE ARE NOT reasonably expected to be available within the next 5 years based on the capital facility plans of the district. Explain in space below or on attached _____ (Number of sheets)
 Project will not be served for the following reason(s): _____
- C. District conditions are attached. Number of sheets attached: _____
 District has specific water reclamation conditions which are attached. Number of sheets attached: _____
 District will submit conditions at a later date.
- D. How far will the pipeline(s) have to be extended to serve the project? _____

This Project Facility Availability Form is valid until final discretionary action is taken pursuant to the application for the proposed project or until it is withdrawn, unless a shorter expiration date is otherwise noted.

Authorized signature: [Signature] Print name Debby Troutt
 Print title General Manager Phone 619 766 4359 Date 12/12/12

NOTE: THIS DOCUMENT IS NOT A COMMITMENT OF SERVICE OR FACILITIES BY THE DISTRICT
 On completion of Section 2 by the district, applicant is to submit this form with application to:
 Zoning Counter, Department of Planning and Land Use, 5201 Ruffin Road, San Diego, CA 92123



DPLU-399W (12/09)

SDC PDS RCVD 04-16-13
REZ12-005
P12-010